

The Journal of

MEDICAL EDUCATION



VOL. 27

JANUARY, 1952

No. 1

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Volume 27

JANUARY 1952

No. 1

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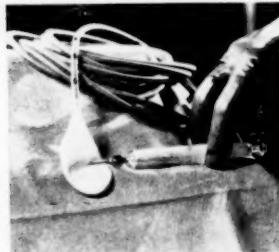
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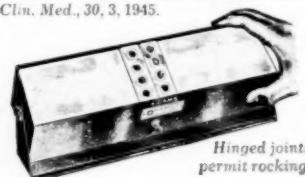
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George Packer Berry
PRESIDENT — 1952

Dr. Berry, Dean of Harvard Medical School, becomes President for 1952. He has been on the Executive Council since 1948, is a member of the Committee on Student Personnel Practices, Committee on Financial Aid to Medical Education, and Committee on National Emergency Planning. He was Vice-President in 1948.



The 1951 Borden Award in Medical Science was made to Dr. *Edwin Bennett Astwood* (left), research professor of medicine at Tufts College Medical School. *W. A. Wentworth* (center), secretary of the Borden Company Foundation made the presentation. Dr. *David P. Barr* (right), professor and head of the department of medicine at Cornell University Medical College gave the nominating address outlining the important research studies by Dr. Astwood.

Dr. *Joseph C. Hinsey* was re-elected as Chairman of the Executive Council, Dr. *Ward Darby* was named President-Elect and Dr. *Stanley Dard* was elected to the office of Vice-President. Drs. *John B. Youmans* and *Dean F. Smiley* were re-elected to the offices of Treasurer and Secretary, respectively. Drs. *Vernon Lippard* and *Edward L. Turner* were re-elected to the Executive Council.

The Minutes of the Proceedings of the 62nd Annual Meeting will be published in the near future. The 1952 (63rd) Annual Meeting of the Association is scheduled for November 10, 11, and 12 at The Broadmoor, Colorado Springs, Colorado.

Quotables

Let me remind the doctor who says that time does not permit for developing helpful relationships that the old family doctor was certainly one of the busiest of men. He had learned how to use time; he had learned how to relax with his patients and to let them feel that while with them he was theirs alone. You can be of tremendous help in half an hour, or even ten minutes, if that time is spent with real concern for the patient. But it is wasted if the concern is for yourself and your next appointment. Time, sympathy and understanding must be lavishly dispensed, but the reward is to be found in that personal bond which forms the greatest satisfaction of the practice of medicine.—"The Complete Physician", I. S. Ravdin. A Commencement Address to the graduating class of New York Medical College, June 7, 1951.

The physician is responsible for the patient in health and in illness. This requires professional evaluation of the person in his environment and the application of knowledge from the humanities and from the preclinical and clinical fields to the care of the patient. Since the physician continuously and humbly searches for the truth, he remains an investigator for life. . . . —from the preface of "A Syllabus of Laboratory Examinations in Clinical Diagnosis", edited by Thomas Hale Ham, Harvard University Press, Cambridge, Mass. 1950.

Let us remember that medical men won their standing in the past, not as colorless scientific machines, but as sympathetic and understanding human beings and an active power for good in their community. We can maintain our heritage only if we are leading citizens as well as able specialists.—"The Doctor as Citizen", the Fellowship Address for the American College of Surgeons, Nov. 9, 1951, J. Roscoe Miller, President, Northwestern University.

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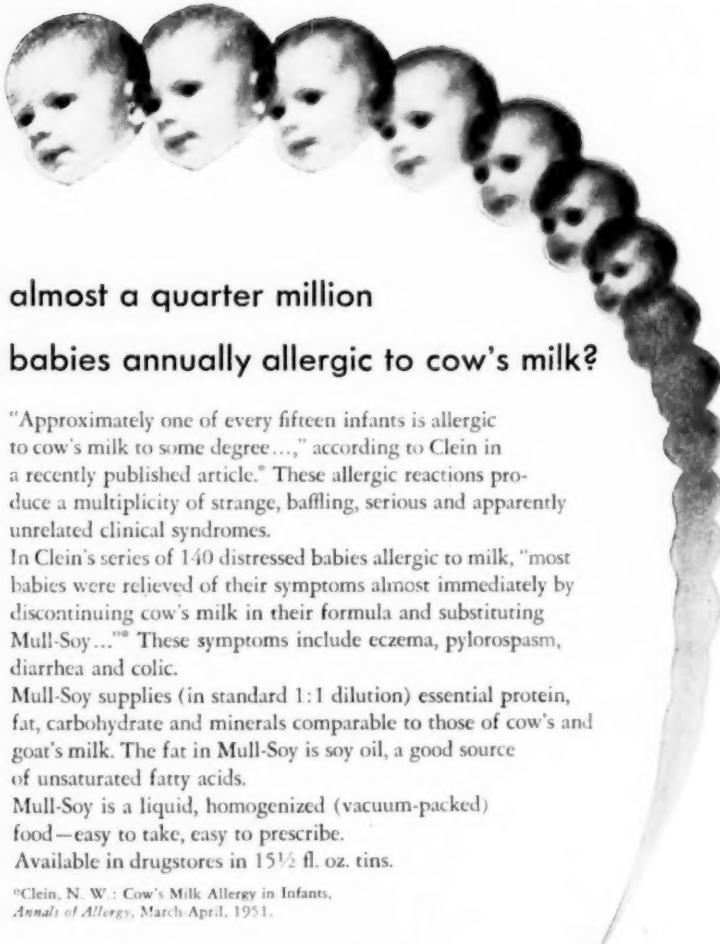
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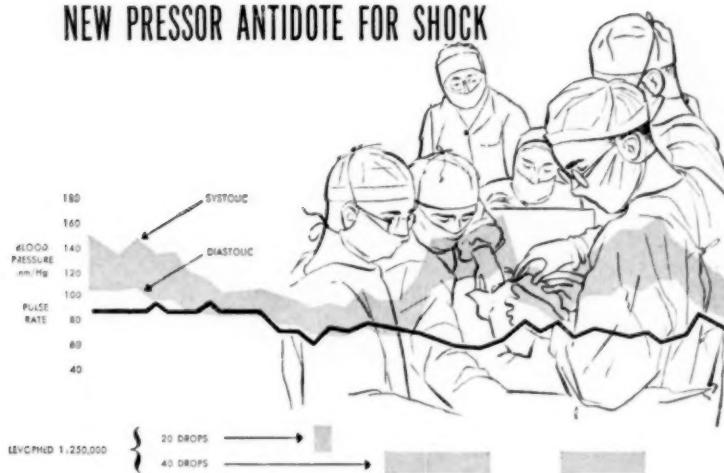
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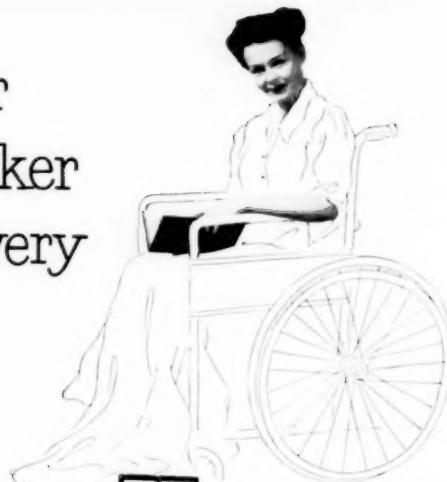
² Wilson, C.M., and Basford, F.C.: Univ. Michigan Med. Bull., 16:57, March 1950.

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¹Spies, T. D.: Rehabilitation Through Better Nutrition. Philadelphia, W. B. Saunders Co., 1947, p. 62.

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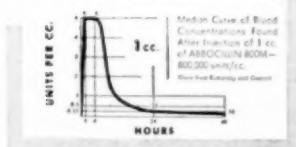
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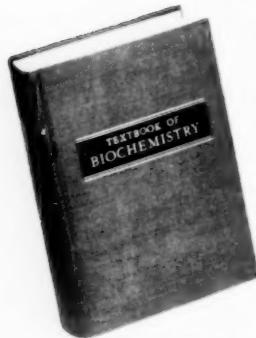
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Retrospect and Prospect

Arthur C. Bachmeyer*

What are some of the major problems facing medical educators today? Where does the Association of American Medical Colleges fit into the broad pattern of medical education? Dr. Bachmeyer's Presidential address evaluates current progress and indicates areas for continuing effort.

Your generous action in electing me to serve as President is sincerely appreciated. As my retirement from the University of Chicago is scheduled for the near future, this honor crowns my active career in medical education and will be cherished through the years to come. I am deeply grateful.

The records of the Association indicate that my attendance at the annual meetings has been constant since 1925. My own records show that I attended the meetings held in conjunction with those of the Annual Congress on Medical Education beginning in 1920. It was my privilege to serve as a member of the Executive Council in 1932 and 1933 and as Treasurer from 1935 to 1949 when you placed me in the office of President-Elect. These years of intimate contact with the affairs of the Association enriched my knowledge of the work of the organization and gave me an understanding of the many problems that confront our Colleges.

With this background and inasmuch

as my remarks are in the nature of a swan song, I trust that you will bear with me if I indulge in some retrospection and offer some comments upon a few current problems, also some concerning the future of the Association.

Brief History of the Association

Our program indicates that this is the 62nd annual meeting of the Association. However, there is some basis for laying claim to a longer existence. The first call for the purpose of organizing an Association of Medical Colleges was issued on May 15, 1876. This resulted in a conference held on June 2nd and 3rd, 1876, which was styled: "Association of Representatives of American Medical Colleges." The following meeting, on June 2, 3 and 4, 1877, was held under the caption: "Provisional Association of American Medical Colleges." At this meeting a constitution was adopted which changed the name to "American Medical College Association." Under this title, meetings were held during a period of five years. Then, as a result of controversy over the question whether or not the medical course should be extended from two to three years, a number of Eastern schools which opposed the ex-

*Presidential Address at the 62nd Annual Meeting of the Association of American Medical Colleges, French Lick, Indiana, Oct. 29, 1951. Dr. Bachmeyer is Associate Dean, Emeritus, University of Chicago Division of Biological Sciences and past-President of the American College of Hospital Administrators and the American Hospital Association.

tension withdrew and, for all practical purposes, the Association was disbanded. There was a gap of seven years during which no meetings were held. Then, in 1890, upon the initiative of the four medical colleges in Baltimore and the staff of Johns Hopkins Hospital, the present Association was organized.

From 1890 to 1903 this Association was the only organization in the country that was directly interested and active in the field of medical education. However, its membership comprised less than half of the then existing medical schools. Its organization was quite informal. It lacked financial support and strength. It exerted comparatively little influence upon the work of the Colleges or upon the general development of medical education.

Relationship to Federation of State Medical Boards

The Federation of State Medical Boards was organized in 1902. While as a Federation this organization has never had any definite authority, the individual State Boards, backed by legislation, have had considerable influence upon our Colleges. For the most part, however, their regulations have followed rather than preceded the advances that have been made in medical education. There was one occasion when the Federation (or its officers) looked with some favor upon a proposal to establish a "National Register of Physicians" instead of granting license to practice as a result of State Board examinations. This proposal, if adopted, would have placed upon the colleges the responsibility of certifying the medical school graduate's competence to enter upon the practice of medicine. It would have necessitated a more rigorous inspection of colleges and a check upon their maintenance of stand-

ards of performance. It would have imposed greater responsibility as an accrediting agency. The proposal was not supported by the Association, never got beyond the stage of informal discussion, and has never been revived. There were, however, a goodly number of Deans at that time who were of the opinion that the proposal was sound and that it offered a possible solution to the troublesome problem of State Board examinations and interstate reciprocity for graduates of American colleges. Now that all medical schools in this country are accredited (or on the "approved" list) and the Association is in better financial circumstances, this project might well merit reconsideration.

The Council and the Association

The Council on Medical Education and Hospitals of the American Medical Association was organized in 1903. I need not remind this audience of the monumental survey of medical colleges made by Abraham Flexner which was initiated by the Council and which marks the beginning of the modern era in medical education in the United States. Supported by the strong resources of the American Medical Association, the Council has been able to carry on an effective program and to undertake activities which the College Association could not undertake because of its greatly restricted finances. Officers and members of our Association, and particularly presidents of our universities, have at times objected to the Council's activities on the basis that as the representative of the practicing profession it had too large an influence upon the colleges. However, the Council's work has been upon a high plane; its influence has been consistently in the direction of improving educational standards.

Our Colleges often have turned to the

Council for assistance and advice rather than to the Association. This, no doubt, has been due to the fact that the Council was the stronger organization. Also, because so large a proportion of the members of our faculties, who were primarily dependent upon their income from the practice of medicine, were closely associated with, and gave their first allegiance to, the American Medical Association. Relations between the College Association and the Council (and its parent body) at times have not been too congenial. When the Liaison Committee was formed some ten years ago, fears were expressed by some of our members that the Committee would be dominated by and become a mere tool of the Council to the detriment of the Association. As a member of that committee since its inception, I can testify to the fact that this has never been the case. The Association's representatives have not seen "eye-to-eye" on all occasions with the representatives of the Council. But there has been "give and take" between them. Wholesome discussions have usually led to agreement. On the few occasions when this has not been the case there was full understanding of the rights of either group to its own opinion and freedom of action. I am firmly of the opinion that the Liaison Committee serves a very worthwhile purpose and that through its services more cordial relations have been promoted between Council and Association.

The Problem of Concerted Action

An organization such as the Association of American Medical Colleges can only be as strong as its members desire it to be. As a self-policing body it can be effective only when rules and regulations are adopted which are sound and fair and when such regulations are enforced without bias, fear or favor. When

resolutions are adopted in annual assembly and subsequently are circumvented or not fully supported individually by the members or when members act independently of the Association, the organization is weakened. Particularly is this the case when your officers are dealing with governmental agencies or other groups. On several occasions this failure to abide by democratic action has placed your elected spokesmen in embarrassing positions and has operated to the disadvantage of the Association.

Last year the assembly voted to give the officers authority to speak for the colleges on all matters pertaining to financial aid to medical education, after polling the member colleges and determining majority opinion or desire.

I trust that you will stand not only by that action, but will extend it to all matters of general policy concerning medical education. My plea is for full discussion of important measures at the business sessions and then full support by *all* members of the action that is taken.

Our Debt to Executive Personnel

As I look at the Association today and particularly at its budget I cannot help but think back to the days when funds were scarcely sufficient to pay a meager salary to the Secretary; when Fred Zapffe took from his small income the cost of postage for the mailing of notices to the colleges. As the representatives of our member colleges change (and there has been an almost complete turnover in administrative officers in the last ten years) the contribution which Fred Zapffe made, in keeping the Association alive, is likely to be forgotten. Many will only remember him as he was in his declining years when his inner fires were damped and illness had sapped his strength. Had it not been for him and his devotion to his

Arthur C. Bachmeyer

tasks it is questionable whether the Association would be here today and would have achieved its present stature. His death on March 10 of this year terminated a span of over half a century of service and severed the only remaining link with the founders of the Association. It is to be regretted that he did not live to record the history of our organization, for there is so much that is not recorded in our archives.

I cannot refrain, at this time, from paying tribute to the splendid, unselfish and conscientious work of the Chairman of our Executive Council, Joseph Hinsey. For the past several years he has given unstintingly of his time and effort to the Association, at no little personal sacrifice. Cornell University also merits a vote of gratitude for making his services available. The Association's growth in national stature is due in large measure to his efforts and, I am sure Joe would want me to add, to the cordial cooperation of the members of the Council and Headquarters' Staff.

The increased financial support from the member colleges voted in 1947, funds obtained from the Medical College Admission Test, and the very generous financial support of several Foundations in more recent years have made it possible to expand the staff in the central office. In Dean Smiley and John Stalnaker we have two earnest, competent executives who, with their assistants, are now able and eager to render a far greater measure of service to the member colleges than has been possible heretofore. The records maintained at headquarters are in good shape, information is more readily available, interesting and valuable studies are in progress and reports can be made more promptly. Much, however, depends upon your cooperation

for you are the source of the data upon which reports are based.

Projects and Committees

After almost eighteen years of experience of questionable value with the Moss Aptitude test, a Committee on Student Personnel Practices under the chairmanship of Carlyle Jacobson was established. The Association is indebted to Dr. Jacobson and his co-workers for the supervision of a broader program pertaining to student affairs. Reports which have been issued provide answers to some of the unwarranted accusations that have been made against our Colleges. Studies in progress under the auspices of this committee should be of further assistance in this area. The Medical College Admission Test (a designation that should be changed) is better organized and its results are more quickly available to Admissions Committees. Studies that will enable Admissions Committees to better evaluate the test scores are in progress.

The Intern Placement Project—about which more will be heard later—could not have been conducted in earlier years.

Our Journal of MEDICAL EDUCATION which, until the issue of May 1951 was the result of Fred Zapffe's unassisted efforts, has been placed under an Editorial Board with Dean Smiley as Editor and William Swanberg, Managing Editor. The latter gives his full time to the publication. The Journal should become of steadily increasing value to medical educators. As the only publication devoted to medical education, the Journal occupies a unique place in our literature and has an important role to perform. In my opinion (and I hope in yours) the last three issues represent a distinct improvement over former ones and give promise of further development. The Journal merits your interest and needs your sup-

Retrospect and Prospect

port. It must depend in large measure upon articles prepared by members of our faculties. As published at present, it fails to meet the need for current news of college activities. Its usefulness would be enhanced if it were issued monthly, especially during those months when all colleges are in session. Its value would also be increased if each dean would appoint a Journal correspondent and make it his responsibility to send current news of the College to the Editor. The Journal should not only be a valuable instrument for our colleges, but also should be helpful to our colleagues in other countries.

The Medical Film Institute under the supervision of the Committee headed by Dr. Walter A. Bloedorn and the direction of Dr. David Ruhe is developing a very worthwhile program. The article pertaining to the installation and use of television equipment which appeared in the July issue of the Journal is evidence of the work of the staff. Any college contemplating the use of television would profit by the careful study of this article. The card catalogue and critical description of medical motion picture films which is scheduled for distribution early next year should be of material assistance in selecting teaching films. The Institute should develop into a valuable asset of the Association. The members owe a debt of gratitude to Drs. Bloedorn, Ruhe and their co-workers for the effort they have expended in the initiation and progress of this project.

These several activities are illustrative of the Association's service to its members. There are other committees whose activities merit recognition here but time will not permit comment concerning them. In one way or another they are helpful to administrators and faculties and represent the type of service that can

be made available to the members. Representatives of 40 of our member colleges serve on one or more of these committees, thus providing opportunity for direct participation in the affairs of the Association by a broad segment of the membership.

Location of Meetings

From 1923 to 1945 inclusive, our meetings were held in twenty-three different cities in which thirty-two member colleges were located. (This listing excludes Chicago and the Chicago schools). There were both advantages and disadvantages in this practice. On the favorable side, it offered the opportunity for members to visit the local college or colleges, to see their facilities and their faculties in action. It provided greater opportunity for nation-wide publicity concerning the Association. The meetings particularly brought the Association to the attention of the members of the local faculty and medical profession and permitted their attendance and often participation in the program. It also brought a certain stimulus to the school. Chief among the disadvantages were the diversions which took members from the meetings and interfered with those intimate "out-of-meeting" discussions and associations among the deans and others in attendance that add greatly to our meetings. There was also the burden of expense to the local school. During these two score and more years, expenses for entertainment mounted steadily as schools strived to out-do each other in this respect. In the latter years of this period, the expenses became a burden that discouraged invitations.

Our present practice of meeting at a resort, usually quite distant from a school, also has its advantages and disadvantages. The expense of members' attendance is somewhat greater. Access to the meeting

place is often inconvenient for some members. The isolation, however, from extraneous diversions does permit greater opportunity to become better acquainted with colleagues and to exchange notes and experiences with them.

I am strongly of the opinion that there is much merit in the former practice and that, for the faculties at the schools visited, the advantages outweigh the disadvantages. As a dean, I can assert that through the years these meetings at the various colleges were of great personal value. They made me more keenly aware, than did discussion alone, of the need for continual study of the many problems that daily confront administrative officers. They also extended my knowledge of the facilities of the colleges visited. I suggest that these practices be seriously evaluated by the Executive Council.

The Problem of the Internship

Our Association, the Hospital Associations, the Council on Medical Education, and individual medical colleges and hospitals have struggled with the perennial problem of the internship for over thirty years without finding a solution. After careful planning and a trial-run, a matching plan of intern appointment has been devised. It is believed that this plan will be a more satisfactory method of placement than any previous scheme. Its success will depend upon the complete cooperation of medical school authorities, hospitals and students. However, no system will be satisfactory to all concerned so long as the number of internships so far exceeds the number of graduates and so long as the role of the internship in medical education remains so poorly defined.

In my opinion it is this Association's responsibility to clearly define the place

of the internship in the education of the physician.

Is the internship an *integral* part of undergraduate medical education? Except in a very few schools it is not prerequisite to the M.D. degree, but a large number of the states make it a requirement for entrance to the examination for licensure.

If the internship *is* an integral part of the undergraduate education for medicine, then it appears to me to follow, logically, that the colleges should prescribe its educational content and exercise control over it. To assume this responsibility would impose upon the colleges some expense, much arduous work, and the necessity of developing definite affiliations with a selected group of hospitals. This need not restrict a school's graduates to service in hospitals affiliated with that school, for transfer to a hospital affiliated with another school might readily be arranged.

If the internship *is not* a part of undergraduate medical education then, logically, the colleges should have no more interest in or control over it than they have over any other form of postgraduate education.

If the internship is not a part of undergraduate education, but the State Boards desire to require such training and experience before admission to examination for licensure, then they should prescribe the content of the internship and exercise control over it. Some State Boards do exercise a measure of control, such as specifying the type of intern program that is acceptable, but in general their requirements as to educational content are meager and indefinite.

If the internship is to be an educational experience, then it appears to me that it should be conducted as such. The

service aspects should be subordinated to the educational. Many hospitals, including the "teaching" hospitals, emphasize the service aspects, the educational features being more or less incidental. If the service aspects are to predominate in the internship then the hospitals should be as free to enlist their interns as they are to secure any other of their service personnel.

The intern problem will remain a troublesome one until this basic question is answered. It is one of the most important issues confronting our Colleges and their students and requires careful study and *definite action*. In my opinion, it is *this Association's responsibility* to clearly define the status of the internship in medical education. To defer action or evade the responsibility will not only continue the confusion to the detriment of students, colleges, and hospitals, but will weaken our Association.

Many other problems confront our Colleges in which concerted action through the Association can be helpful.

There is the constant problem of *financial support*. The recent report of the Council on Medical Education indicated that school budgets had been materially increased in the last few years. Had the value of the dollar remained the same, much of the need reported by the schools in 1948 would have been met. However, in these inflationary times it is probable that the need is almost as great, measured in today's dollar, as it was then. The Association has gone on record as favoring Federal aid as an emergency measure. Earnest effort was expended in behalf of the adoption of Senate Bill 337 as originally drafted. However, the attempt to amend this bill (in the words of Dr. George Berry) "so changed the philosophy of the bill" and "put an un-

reasonable emphasis on expansion (of enrollment) while simultaneously jeopardizing the going enterprise" that it would be far wiser to defeat the proposed legislation than to pass it. Fortunately, the amendment failed of adoption and the original bill is still pending.

The *National Fund for Medical Education* has been established and you will receive further information concerning this endeavor. The American Medical Education Foundation has channeled its funds through the National Fund. The Colleges already have benefited by the first grant distributed by the Fund. The Fund and the Foundation merit and must have our loyal support if they are to be successful. Such support should not interfere with the individual school's efforts to increase its own revenues. Adequate financial support secured through voluntary effort or at the local level of government would be far more preferable than Federal aid with its many hazards.

Need for Improved Accounting Methods

The assertion is made repeatedly that medical education is the most expensive education. Under present circumstances it is practically impossible to discuss this assertion intelligently. Surely, the practice of dividing the expenditures or budget of any medical college by the number of its undergraduate students to determine the average cost per student is utterly fallacious. There is great need for a very searching and careful study in this connection. Recent studies of the financial aspects of operation clearly indicate the need for improved and more uniform accounting methods.

Then there are other problems such as: The Proper Preparation of the Student for the Study of Medicine; The Better Selection of Matriculants; The

Content of the Curriculum; The Development of an Integrated Program of Study; The Recruitment, Training and Remuneration of the Faculty; The Improvement of Teaching Methods; The Conduct of a Scope of Activities that is Well Balanced Between Teaching, Research and Service; Intra-university Relations; Public Relations and Relations with the Medical Profession (as represented by organized medical societies and alumnal bodies) and many others.

Time will not permit comment concerning these problems. The Association and its staff can be helpful in solving some of them. Others offer a challenge for leadership to the individual colleges.

The *Survey of Medical Education* under the direction of Dr. John Deitrick, now nearing completion, should bring some of these problems into sharper focus and throw light upon other areas to which the Association should give earnest attention. The staff of the Survey, though constantly short-handed, has labored diligently. The report alone will not improve the work of our Colleges. It will remain the task of the Association and the Colleges to follow it up with further study and action. The Survey is timely and should be most helpful in this critical period in the development of medical education. The report should mark a milestone in American Medical Education.

Need More Emphasis on Teaching Ability

The Association has co-sponsored, with the American Psychiatric Association, a Conference on Psychiatric Education and is now engaged in planning a similar one with the Association of Professors of Preventive Medicine. These conferences should make important contributions in these areas of medical edu-

cation. They relate primarily to subject matter to be included in the curriculum rather than to teaching methods.

Many of the members of our medical faculties have their primary interest in research, while others, particularly in the clinical years, are busily engaged in the practice of medicine. Except for occasional appearances on our programs or articles in the Journal there is not much discussion among them concerning the pedagogical aspect of their work. Their method of teaching is usually the result of their own learning experience—it may be very good, indifferent or poor. Members of our faculties are usually appointed because of their achievements as scientists or as clinicians, seldom on the basis of their pedagogical ability.

In order to arouse interest among them in better and more effective methods of teaching and to direct their attention to their responsibilities as teachers, it has been proposed that the Association sponsor the organization and conduct of other Institutes for Faculty Members. The proposal suggests an initial trial program such as the following: The Deans (alone or in conference with the Heads of their Departments of Medicine) would nominate a representative of the Department, preferably one who offers promise of future development, to attend a two or three day conference of such teachers. At this conference, discussions might cover such topics as: The Preparation of the Student for Clinical Study; The Content of the Curriculum in Internal Medicine; Teaching Methods in Clinical Medicine; The Conduct of the Clinical Clerkship; Teaching in the Medical Outpatient Clinic; Evaluation of Student Performance and Progress, etc. Selected individuals would lead the discussions or stage demonstrations, but all attendants would

be afforded opportunity to participate freely. It is believed that a conference of this nature would be a worthwhile means of improving teaching methods in many schools and would serve to arouse the interest of the faculty in their pedagogical work. If such an initial conference proved successful, others for other departments of the schools could follow. The Association might organize conferences of this or similar type immediately preceding or following the annual meeting. It is believed that funds to cover the cost of a pilot or initial conference might be secured from one of the Foundations that have shown an interest in medical education. Subsequently, should the effort be successful, there would be the possibility of further support from this same source or the results might justify the expense by the individual schools or the Association. I leave the suggestion with you for consideration and ask that you communicate your thoughts to the officers, members of the Council or Staff of the Association for their guidance.

The Colleges holding membership in our Association share the responsibility of educating the future physicians of America and, through their graduates, of

providing adequate and competent medical care for the American people. Basically, they are responsible for the health of the nation. Individually each College must exert its every effort to improve the quality of its product. Collectively, through the Association, they can help each other develop and maintain a high quality of performance. The public, today, is conscious of the value of good health and more aware than ever of the increased benefits now available to them through the advances made in the biological sciences. In the interest of the Colleges the public should be told of the essential part which the medical colleges perform in this connection and of their activities in behalf of the health and welfare of the people. The Association can serve best of all agencies to this end.

The Association has grown in strength and stature and has won noteworthy recognition in national circles in recent years. With your continuing interest and loyal support it will not only maintain its present position, but will continue to grow in strength and influence. The Association should be fully representative of our medical schools and be the authoritative voice of American Medical Education.

The Family in the Training of Medical Students

John P. Hubbard, John McK. Mitchell
Mary L. Poole, Arthur M. Rogers*

To know his patients and to appreciate what he can and what he cannot do for them is perhaps the most important aspect of a doctor's professional equipment. This article outlines a challenging and promising approach to the problem of when and how the medical student can best learn about the real requirements of the doctor's job.

In the academic year 1949-50, a new teaching project was initiated by the Dean at the University of Pennsylvania School of Medicine. It provides an opportunity for medical students to assume gradually increasing responsibility for the medical and related problems of a family assigned to the student and followed by him in the clinic, hospital and home, throughout the four years in medical school.* Many teaching centers have given their students varying degrees of contact with families during the third or fourth year, but, as of present date (Summer 1951), we are not aware of any teaching program elsewhere in which they have been given an opportunity for such experience at the very outset of their medical education.

Although this program has not yet extended through a four year course, we are presenting this preliminary report of the first two years' experience in the hope that it may be found useful at the present

time when so much attention is being given to new methods of bringing students closer to some of the realities of medical practice in the home and in the community.

The Method

In the fall of 1949 an optional course, designated as "The Family Advisor Group", was offered to the entering class for the first time. The plan was described to the class and it was then made clear that the course was entirely elective, that it would require extracurricular time and that it was necessary to limit the number of students to 15. In spite of this, half the class of 125 applied for the course. In view of the extra time required, consideration was given to the scholastic standing of the 15 students finally selected.

Since April 1950 the program has been under the aegis of the department of Public Health and Preventive Medicine. The students have received close supervision from Dr. Arthur M. Rogers, who holds joint appointment in this department and the department of Medicine and Miss Mary L. Poole, who is director of the Social Service department in the University Hospital and is also a member of this department.

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*The general plan for this program was based on suggestions made by Dr. Kenneth E. Appel, professor of psychiatry.

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Suggestions concerning families suitable for the project were received from members of the Social Service department, interns, residents and staff physicians. The families were then reviewed by the medical and social service advisors. Efforts were made to include as wide a variety of family and medical situations as possible. From the economic standpoint they ranged from a middle income group to recipients of public assistance. Medical problems included rheumatic fever, diabetes and congenital deformities. In addition there were supposedly well families whose only hospital contact had been for obstetrical care. Most of the families had been known to the Hospital and Social Service department for a long period, but a few relatively unknown families were purposely included.

The selected families were contacted, usually by the social worker, told of the plan and asked if they would like to have a "Family Health Advisor." Only one of the original 40 families approached, refused to participate. If there was a family physician, his approval was obtained and his cooperation sought. Every physician was interested, welcomed the student and, if indicated, held a conference with him.

The major responsibility in describing the plan to the families, was purposely left to the students. The families were told, however, that while the student would help in coordinating their medical care, he would not take over any phase of treatment, since he was a "doctor in training", this term seeming preferable to "medical student." The students were carefully instructed on this point and advised to make it quite clear that they were not "doctors."

The students were introduced to their families in a variety of ways. When a

parent happened to be a patient in the Hospital, introduction was made at the bedside. Others met by appointment in the Hospital. In some cases it was necessary for the student to telephone and arrange to make his initial visit in the home.

The various services of the Hospital were informed of the program and asked to include the student in conferences when major decisions as to diagnosis or treatment were being made. The student's name and designation as Family Health Advisor were placed on the front sheet of the hospital record. Whenever possible, arrangements were made to have students present when members of their families were seen in clinics or admitted to the hospital wards.

In general, students have visited their families about once a month. During acute illness, or when special problems have arisen, visits have been more frequent. At times the families have requested extra calls. It is difficult to determine accurately the number of hours that the students have devoted to the course. Most of them spend about 6 hours a month but in some cases considerably more.

Each class group meets once a month to discuss informally some phase of medical care or community service. Guest speakers have been selected to discuss subjects about which the students have indicated an interest, for example, preventive pediatrics, emotional development of children, child health facilities, public assistance programs. Wetzel Grids for evaluating physical fitness have been described and maintained when indicated. Early in the group discussions, hospital administration and cost of medical care were points of interest so that the Hospital Administrator was asked to de-

scribe the management and economic aspects of hospital services. As an aid in their interviews with their families and in their understanding of children, special books and pamphlets were made available.*

In addition to the monthly meetings, the group was divided into three sections which met once a month with the faculty advisors to discuss their families and to help them with any problems. In this way each student gained an intimate knowledge not only of his own family but of the families assigned to the others in his section. The faculty advisors were always available for individual help and advice.

This experience proved so successful during the first year that it was developed on a somewhat larger scale during the academic year 1950-51. The original 15 students continued with their families throughout their second year. A group of 25 students from the first-year class became Family Advisors. From this class, which also numbered 125, there were over 70 students who wished to participate. In the second year of the program the total group thus included 40 students, 25 from the first-year class and 15 from the second-year class. In the fall of 1951, it is contemplated that another 40 students will be added, making a total of 80. Thereafter, we hope to add increasing numbers of students from each entering class.

The Results

In viewing the results of the first two years' experience with the Family Advi-

sor Group, it is necessary to consider both the student and the family. Is the experience favorable for the students? Is the experience profitable for the families, or are they confused and misguided by their "doctors in training"?

From the point of view of the student, the answer will ultimately be given when sufficient time has elapsed, and sufficient evidence has accumulated, to demonstrate the effect upon the transition from student to physician. To date we have attempted no formal assay. However, enough experience has already accumulated to convince us that the plan offers much of value.

In the first place, the students want this type of experience; we have accepted only a portion of those who expressed a desire to take this optional course. This is an important point. They are imbued with the idealism of their chosen profession and are naturally impatient to deal with the problems and ills of their fellowmen. A family, which the student can undertake as a personal responsibility, is a beginning in the physician-patient relationship; here is what he came to medical school to get. Although he may appreciate the importance of his basic science courses and although instances of their direct applicability may have been demonstrated to him in correlation clinics or by some other device; nevertheless, there is at best scant opportunity for patient contact during the first two years of medical school. The Family Advisor experience is in essence a laboratory course in human relations, successful because the student is an effective agent in the experiment, not a mere observer.

The most convincing evidence of the educational value of the Family Advisor program is to be found in the reports of the students themselves. Each student is

*Interviewing—Its Principles and Methods, Annette Garrett, Family Service Association of America, 192 Lexington Ave., New York 16, N. Y.; Some Special Problems of Children—Aged 2 to 3 years, Nina Rideour, National Mental Health Foundation, 1790 Broadway, New York 19, N. Y.; Understand Your Child—From 6 to 12, Clara Lambert, Public Affairs Committee, 22 E. 38th St., New York 16, N. Y.; Patients Have Families, Henry B. Richardson, The Commonwealth Fund, New York, 1945.

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required to write a report of his experience with his family. From these reports a few illustrative instances are quoted here. Other illuminating examples might be cited from practically every one of the group. It is interesting to note the differences in the focus of attention of the first-year and the second-year Family Advisors.

The following are excerpts from the reports of first-year medical students:

My primary objective during this first year was an attempt to analyze the family and its social, environmental and personality structure.

In becoming familiar with the family, I have gained an insight into the working of a family unit. I hope that I have been of assistance to them. I feel that this experience has given me some needed confidence in assuming and establishing a professional relationship with people and future patients. It has brought home to me the importance of understanding the person with whom I am dealing and who has asked me for help. Even for a first year medical student it is easy to visualize the pitfalls a physician can encounter if he sees and treats his patients as subjects of more or less medical interest rather than as people seeking aid, comfort and reassurance.



I first met my family in the Maternity Ward during the mother's second pregnancy. At that time the mother, who suffers from hypertension, explained the main problem that was facing the family. The mother-in-law is a diabetic and had become a disturbing influence on the family, since she refused to go regularly to the physician. Because of her poor health she became extremely irritable and her visits from her New Jersey home three or four times a week were a cause of constant difficulty to the family. A meeting was arranged and when the seriousness of her condition was explained to her, she was easily convinced to return to her doctor. This not only resulted in improvement in her own health, but in improvement also in the situation of the whole family.

This type of experience is most valuable for anyone planning to enter general practice since a great many situations encountered by a general practitioner are of a family nature; this association in the medical school forms a foundation for adequate handling of these future patients.



On first acquaintance, it appeared that my family lived together in a fairly well-adjusted manner, but on becoming more familiar with them, this is not an altogether true picture. The father seems to have an attitude of resignation

toward his children, rather than one of pleasure; he has a circulatory disease which undoubtedly alters his attitudes and ability to work. This may be a factor in a problem with Robert who, at the age of six, is having difficulty with bed-wetting.

I feel that I have aided the family in several specific ways. Penicillin treatment for the mother (who has syphilis) was effected as a result of my informing the Social Service department of the Hospital that she was not receiving treatment. This was particularly important since she was pregnant, and the treatment was urgent for the sake of the child. The treatment was begun, and now the baby has no signs of syphilis. The mother has faithfully taken the child to the Hospital, partly, I believe, as a result of my interest, making the Hospital seem less impersonal, and also because of my efforts to impress upon her the importance of following the Hospital's recommendations.

This program has given us a realization of the necessity of considering not only an individual and his particular medical difficulties, but also his problems in relation to the family as a unit. Certainly we also learn to consider patients as people, not mere cases.



The complexity and multiplicity of the family's problems are such that the Hospital clinic staff can do little with the family. For this reason I have concentrated my efforts on getting acquainted with the family and attempting to alleviate some of their many difficulties. The family situation is an excellent example of how emotional and environmental factors play a major role in the illnesses of the family as the hospital sees them. It illustrates how a real understanding of each individual of the family is necessary in order to treat adequately their medical problems.



The chief advantage of the experience with this family has been to make me more conscious of the importance of the human relationships of the patient. Those of us in this Family Advisor Group have benefited not only from our association with the family, but from being accorded an early contact with the Hospital.

The members of the Family Advisor Group frequently express their appreciation of the opportunity to learn, at first hand, outpatient and hospital procedure. Other members of the first and second year classes, not included in the Family Advisor Group, may be introduced to clinical medicine, they may see patients in amphitheater clinics, they may perform physical examinations, but always it is in a role entirely removed from a

personal feeling of responsibility for the individual patient. Here, on the other hand, the student becomes a member of the team, participating actively in services rendered to the patient. It is the student who knows the family well and who is able to bring to the hospital physician information which is pertinent to the care of the patient. Indeed the student may step into the role of teacher, as shown by a keen observation made by a first-year student:

It is obvious that at least a few of the doctors in the Hospital have a very limited conception of what a general practitioner is in a small neighborhood or community, how he functions, what his values are, and what his status is. To the extent that this program broadens the attitude of the medical faculty, it may have some value for them as well as for the student and the family.

The above examples are sufficient to illustrate the opinions and attitudes that develop in these students after one year's experience in the Family Advisor Group. We wish now to cite two quotations from students at the end of their second year of experience in this group. These quotations are cited rather fully since they demonstrate in dramatic fashion the further unfolding of the physician-patient relationship and the student's awareness of some very fundamental concepts of the care of the patient.

A second-year medical student:

This family has many problems which I do not have time to discuss. I shall focus on Joseph (age 2½) and a particular problem with which many other family problems are related. About two months ago I urged Mrs. V. to take Joseph to the Well-Baby Clinic in her neighborhood for his immunization shots. At that time I suggested that the Clinic examine him generally to find out why he was so underweight. The Well-Baby Clinic said that his tonsils were badly inflamed, that they would have to be removed immediately and that until they were removed he would gain no weight regardless of how well he ate. Joseph was referred to the Out-Patient Department of the University Hospital where the mother was told that there really was no necessity of taking the tonsils out. So here are two conflicting opinions. What is to be done? Should he have his tonsils out, or

shouldn't he, and what good would it do if he did have his tonsils out?

In order to arrive at an answer to these questions, I would like on the one hand to show some of the stresses that are impinging on Joseph and preventing him from developing the way he should; on the other hand on the credit side of the ledger, are the strengths and family resources which are favorable for Joseph.

First, on the debit side, it has been very difficult for the mother to get enough of the proper kind of food. The family live in a neighborhood where the children have no playgrounds, there is not even a back yard. The economic problem is a serious one. The mother works as cashier in a restaurant about 9 hours a day, so she has very little time with the children. From a medical standpoint Joseph is getting about as much care as he can, but from a psychological standpoint the family situation puts a terrific stress upon Joseph which is hard to evaluate. The father can be very kind with the children; he also goes into tremendous rages.

On the credit side of the ledger, what strengths does Joseph have? His mother really cares for the children, and I think she has a genuine love for them; if she were able to be home more often she could help a great deal more. Another element of the social environment which is impinging upon Joseph even though he is young, is the neighbors next door who take quite an interest in him and help a good deal.

So what do we do about Joseph? I am sitting in the middle between the Well-Baby Clinic and the Hospital Out-Patient Department. Actually, if I had more experience and if I knew more about tonsils, I would feel that I would be the one to make the correct decision as to whether these tonsils should come out or not. The Well-Baby Clinic has a fair picture of the family, but their opinion of the tonsils is not supported by the specialist which, in this case, is the Ear, Nose and Throat Clinic. The Clinic, on the other hand, has no picture of the family and is dealing only with the tonsils. As we have heard again and again, one must deal with people individually. You can hear that a lot and believe it is correct, but it doesn't have much meaning until you are actually dealing with the whole individual. Many of those from whom we hear such statements in the Hospital, that is to say the specialists, say it, I think, without having real meaning to them because if they are working only in the Hospital, in a special field, they don't really know what it means.

Last year, this whole complex picture that I am now presenting, was not apparent to me. At the end of my first year with the family my report was to the effect that they were a well adjusted unit. Up to that time the father was at home and things were going rather well. As a matter of fact I thought it was such a simple family that I wanted to have a different one assigned to me for this second year so that I could have more problems to deal with. I now realize

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that the only simple part of that situation was myself!

Another thing has happened in the past year besides learning about medical problems. I actually have felt a very definite and deep sense of responsibility toward this family, more so, I think, than I will feel toward any patient at the University Hospital during the course of the next two years. I really feel that they are my family and, in another strange sort of way that I cannot explain very well, I have come to see that my responsibility is limited and will have to remain limited; there are certain problems that I cannot solve, problems that are not a part of the physician's responsibility.

Another student at the end of his second year devoted most of his report to observations on hospital care as he had seen it through the eyes of one of the members of his family. He stated:

There was always one factor which was lacking in the Hospital, and which, in the past, could be remedied by the family physician, that is, the personal attention of the patient. In the Hospital the doctor cannot be expected to devote as much time as the family physician can give to his patient. In the limited experience which I have so far had in the University Hospital, I have seen the way in which many of the doctors, I won't say how many, take an impersonal viewpoint of their patients and treat them as some inanimate object. In other words, the doctor will discuss the patients in front of them, which I think is very objectionable, and they will completely ignore the patient, not tell him what his trouble is or endeavor to allay his fears. Therefore, many patients work up strong apprehensions. The student, being taught in this environment, naturally is molded to it by the time he gets out at the end of his four years of medical school plus another year of internship; he then doesn't know how to handle a patient, especially in a country community where he is not working in a hospital. This situation can be remedied to a great extent by the type of experience which we are now having and by our contacts with the Social Service Department. It isn't until you have an opportunity to deal with a patient on a social basis rather than on a medical basis that you realize just to what extent the patient is bothered more by his social problems than by his medical problems.

Let me illustrate this point by telling you about Mr. A. His chief problem is that of growing old. He doesn't like to grow old and will not associate with people of his own age. Because of a varicose ulcer he is considerably incapacitated. Recently, while in the Hospital he has developed many apprehensions as to his health—perhaps he picks them up from other patients with whom he talks. He has so many things which he thinks are wrong with him that it is actually criminal that no one has sat down with him before and thus helped to put his

mind at rest. The second day I saw him, he quizzed me extensively on heart disease; he has edema of his legs which he attributed to heart disease but which is probably due to his varicosities. An 82 year old man doesn't have to have the best heart in the world; his is still plenty good. I was able to relieve him on that point as on many other things. Apparently physicians in the old days would sit down and give good counsel and advice to a man in his position. They do not do it in the Hospital. They can't. They don't have time.

Comments

The students' own words as quoted above, give colorful evidence of what this experience means to them. The record is impressive. Here we see a growing awareness of the place of the physician in promoting the health of the family unit. The student learns that individual problems or disease cannot be understood or treated apart from the social and economic stresses and strains of familial relationships. To us who have been close to this teaching experience it is new and exciting to hear a first-year medical student say: "What we have learned in this experience is that we must consider the patient as a whole rather than just his disease, and we must consider also the influences in his family and environment which affect his well being."

One of the important features of this program is the responsibility which is placed upon the student. It is not enough for the student to observe family problems without himself doing something about them. A student may visit a family along with a visiting nurse or social worker. Such visits are, as a matter of fact, a part of our regular curriculum under the heading of social and environmental medicine and we believe that the students benefit from these visits. But where responsibility is lacking, the experience is relatively superficial. The student does not ask himself at the end of the day if what he did was correct; he can take it or leave it.

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We have heard it said that in our Family Advisor Group, the students have too much responsibility too soon, that they have not yet learned their own limitations. Our observations have not supported this criticism. The students have shown a very keen sense of their own limitations. They have relied constantly and heavily upon their faculty advisors.

Is the first year too soon for a student to learn that a physician is not an omniscient person, even though his patients may hold this view of him? At some point the physician must learn to say, "I don't know", without destroying his patient's confidence. It is better to learn this lesson under supervision in medical school than, as is more often the case, to learn it the hard way later in practice.

In our opinion, confirmed by the experience gained so far, it has been a very valuable feature to have the program start in the first year in order to provide an opportunity for the student to mature gradually in this learning experience. The continuing relationships with their families and with the faculty advisors allow the students time to test and to modify their original judgements and attitudes. In this connection it should be emphasized that there must be adequate supervisory personnel with an enthusiasm for teaching and plenty of time for the students, with experience in the medical care of families and with an appreciation of social factors influencing family health and well-being.

An opportune circumstance which has facilitated the conduct of the program is the fact that the Social Service department is located next to the Medical Out-patient department. Actually, the Social Service department has been the geographic center and a very effective coordinating agent because of its natural rela-

tionship with all clinical departments of the Hospital.

An illustrative situation not described above in the quotations from students occurred when one of the students received a call from the family because a child had "spots." The family thought it was measles and wanted advice. After a conference with the faculty advisor the student was told to visit the family, see what he could make of the situation and report back—but first he had better read up on measles. The student spent several hours in the library, learning all he could about measles. He was not studying for an examination, his motive was much more real. He visited the family and agreed that the child did have measles. What then? The student is not a licensed physician and certainly is not in a position to give medical care. After further consultations with the faculty advisor, contact was made with a nearby general practitioner who took charge. A question next arose as to whether a three year old brother whose health was poor should be given gamma globulin. It was the student who persevered during the night and found where immunizing products can be obtained free from the City Health Department. He learned more about measles than could ever be taught in the class room; he will never forget what Koplik's spots look like; he learned much of the role of the general practitioner and the help available from the official health agency.

The reactions of the families, as revealed by the reports of the students and confirmed by the Social Service department, are unequivocally favorable. The families are told that the students are not yet doctors; nevertheless when trouble comes it is their student-doctor the families want and they are not content until

he is there to guide them. When they have occasion to visit the Outpatient department, it is the student-doctor who helps to avoid the difficulties and to steer them through the mysteries and intricacies of the clinical departments. He is there to interpret their ailments and problems to the clinic physician for he, the student-doctor, knows all the home factors which may modify the treatment. He knows all members of the family, he has their confidence and he is helpful in interpreting medical recommendations in terms which are understood.

The obvious benefits to the families and the manner in which they have accepted the students have quieted the apprehensions we felt at the outset in casting these medical freshmen in the capacity of family advisors. Although they are at the very threshold of their medical training, they are nevertheless a hand-picked group of college graduates who, through their own choice, have shown a keen desire for an intelligent approach toward family relationships. And to whom would these families turn if the student advisors were not available to them? A revealing answer to this question is given by a recent study conducted in one of the health districts of New York City.* A number of families were interviewed in order to learn more about family troubles and what is done about them. The replies showed a rather astonishing variety of sources which are sought for advice: relatives, druggists, bartenders, priests, labor leaders, and policemen. Is not the advice of an interested medical student, even though in his first year, as sound or sounder than some of these sources?

One of the most significant attributes of the Family Advisor Group is the op-

portunity which is offered for the students to participate in an active program of health maintenance for the family. This aspect of the program has not yet been developed, but we hope to do so as the students advance into their third and fourth years. Already it may be noted in the quotations from the students' reports, that they have had some influence in prompting the families to visit the clinic, not only for recommended therapy but also for health examinations for the children or the parents. It is now planned to give greater attention to a health inventory of each of the assigned families. Quite apart from the obvious advantages to the family, we have here an almost unlimited teaching potential. Are the children of the families receiving proper immunization and dietary advice? Is the growth and development of the children proceeding in accordance with accepted standards? What is the nutritional status of the individual members of the family? Have any defects, discovered in school health examinations, been corrected and, if not, what should be done about them? Have the adult members of the family had a health examination, and if not—which is almost certain to be the case—what is involved, where should it be done and how much would it cost? What medical service do the employed members of the family get from their places of employment or from labor unions to which they may belong, and how much does this cost? What provision is there for the care of the grandparents? What help is available from health or social agencies in the community? These and many more questions can be answered by the students in relation to real needs of real people—people who look to their student-doctors for help and for whom the students have

**Families in Trouble*, Earl Loman Koos, King's Crown Press, Morningside Heights, New York. 1946.

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a personal feeling. Thus there emerges a pattern by which the student may be brought into direct, responsible and, at the same time, supervised relationship with the elements of a positive health program based upon the family as the irreducible unit of medical care.

Summary

A teaching program is described in which families are assigned to students at the beginning of their first year, thus providing an opportunity for the students to assume gradually increasing responsibility for the medical and related problems of the families in the clinic, hospital and home throughout the four years in the medical school.

The program has been developed slowly as an optional course with 15 students selected for the first-year class in 1949-50, and 25 students from the first-year in 1950-51. An increasing number of students will be added in subsequent years.

The students have been under the close and constant supervision of faculty advisors in the department of Public Health and Preventive Medicine of the Medical School and the department of Social Service of the University Hospital.

We have reviewed some of the very apparent values for students and families and have commented upon certain principles inherent in this type of teaching experience.

Medical-Social Family Studies in Medical Education

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This article describes intensive studies by senior students, designed to acquaint them with environmental medicine and medical-social problems of families. A plan is suggested as a means of giving this type of instruction in the limited time available to fourth-year students.

The importance of emotional, social, environmental, and economic factors in the medical problems of patients is constantly receiving greater recognition in American medical education.¹

The student entering medical school has little appreciation of these problems in medical practice,^{2,3} and it is important that his attitude toward them be guided from the beginning. Otherwise his interest in the clinical years may be diverted to exclusive concentration on the somatic aspects of diagnosis and treatment. During his orientation to the practice of medicine in the first year there is an opportunity to have him recognize that patients are people, members of families and communities, and that these factors are often of primary importance in the medical problems which they present to a physician. When the students learn to take medical histories, usually in the second year, it is important that they learn to take a comprehensive social history which will furnish background for the immediate medical problem which the patient presents. During their clinical years they should be reminded constantly of the social factors operating upon the patients whom they study, and

they should be given an opportunity to make at least one intensive study of a family from a broad medical-social point of view.

There are many practical aspects to be considered in planning this type of instruction, depending upon the size of the student body and the facilities available in each school.⁴ Among the requirements of a successful program are instructors in both preclinical and clinical departments who are familiar and in sympathy with these broader aspects of medicine, good medical social service departments in teaching hospitals, and coordination of instruction between different departments, preferably under the direction of some one member of the faculty who will constantly stimulate and participate in the instruction.

At the New York University College of Medicine such a comprehensive program as that outlined above has not yet been developed, but steps are being taken to implement it in the future. It is the purpose of this paper to present the experience which we have had in conducting medical-social family studies with fourth-year students during their clerkship in Preventive Medicine. The studies were started during the academic year 1941-1942, but this report is based upon our

*From the department of Preventive Medicine, New York University College of Medicine. Aided by a grant from the Milbank Memorial Fund.

experience during the past five years when the program has been supported by a grant from the Milbank Memorial Fund. The College of Medicine has a student body of about 120 in each class. Most of the studies have been made on the families of patients from the wards and outpatient department of Bellevue Hospital, which has a Social Service Division of excellent quality, although there is an inadequate number of workers. Families have also been selected from the College of Medicine Clinic which was transferred two years ago to the University Hospital, and, on rare occasions, from the New York University Medical Group, the Community Service Society and the Visiting Nurse Service of New York. Under the Milbank grant, the department has paid the salary of a Social Work Supervisor at Bellevue Hospital, who has participated largely in the studies and has conducted training conferences for the social workers on this aspect of medical instruction.

The Program of Medical-Social Family Studies

Medical students are assigned to clerkships in Preventive Medicine in groups of 14 to 16 for a period of four weeks. On the first day of the clerkship they are given a syllabus which outlines the purpose and procedure of the family study, and another one on Social Casework in Medicine. On the same day they attend a seminar on medical-social service conducted by the Director of Social Service of Bellevue Hospital.

Families for study are selected with their consent a few days before the beginning of the clerkship by members of the department of Preventive Medicine in conference with the social work supervisors and social workers who have been assigned to studies for the particular

clerkship period. The social worker usually offers a choice from among the families with whom she is working. During the first few days of the clerkship, students are assigned to the selected families, two students being assigned to each family. Each assignment is made at a conference of the students with an instructor from the department of Preventive Medicine, a social work supervisor, and a social worker. At this conference the social worker presents the medical and social problem as far as she knows it at that time. The situation is analyzed and the program of study is planned. If the patient is in the hospital, he is introduced to the students and the necessary relationships for future procedures are established. The students then examine the medical and social service record of the patient, and those of the family if they are available. In the case of outpatients the first contact is usually made on the home visit.

The Home Visit

The next step in the study is the home visit. The appointment is made by the social worker, with as many members of the family present as possible. She introduces the students to the family and helps to guide the discussion of its problems. The students supplement what they have already learned about the family from the social worker by observations and inquiry along the following lines: They observe the home environment including the neighborhood, housing conditions, living quarters including the number of rooms, lay-out, ventilation, heating, and sanitary facilities. They determine the make-up of the household, their ages and relationships, relatives living in the neighborhood or otherwise concerned with the family. They inquire about the health and education of the members of

the family and estimate their intelligence and attitude toward the patient's illness. They obtain a complete family history including pertinent facts in the family background. They get a detailed personal history of the patient including his education, past and present occupation, suitability of his present employment, personal problems, and his attitude toward the total medical-social situation. They also talk over these problems as they relate to the entire family, including those of adjustment to each other and to their environment, with special reference to recreation, religion, and legal complications. The economic condition of the family is discussed including income, expenditures, budgeting, financial assistance from outside sources, and adequacy of the income for carrying the family through the treatment and rehabilitation period required by the patient. Nutrition in relation to income and family customs receives special attention. Finally, the medical needs of the other members of the family are ascertained. Medical situations of even greater importance or interest than those of the patient are frequently encountered.

It may not be possible to obtain all the information at one visit. Care must be taken not to probe too deeply into private affairs until the full confidence of the family is obtained, and this may require subsequent visits or interviews with the patient or individual members of the family.

If the patient has a communicable disease such as tuberculosis, or if some disease requiring attention is encountered in the family, preliminary arrangements are made for the examination of contacts or for the treatment of the condition. The students do not, however, make any physical examinations of persons in their homes.

Follow-up Work

The third step in the study is to follow up observations made on the home visit. This may include visits to related family groups, place of employment, schools, or health, religious, social, legal or relief agencies, to determine source of infection or to study further the social or economic problems faced by the family. If the patient is in the hospital he is visited frequently. The house staff or attending physicians are consulted and the progress of his condition is followed. If he is an outpatient he is usually seen in the clinic and his illness is discussed with the attending physician. If other members of the family require examination or treatment, the social worker makes appointments and tells the appropriate agencies about the Family Study.

The fourth step in the study is a conference of the students with the medical instructor, social work supervisor and social worker on the observations that have been made. The medical-social problem of the family is analyzed and a program for its solution is developed. The written report of the study, to be prepared by the students, is discussed. A fifth period is provided for further field work which may be necessary. This may require a second call at the home, visits to other family groups or to other agencies concerned with the problem.

The above steps are completed in the first three weeks of the clerkship. The students then prepare their written report, submit the rough draft to the medical instructor for suggestions, and make typewritten copies to be filed with the department of Preventive Medicine, the Social Service department of the hospital, and the patient's medical record. The report is prepared in narrative form, giving the significant points in the medical history; a description of the family

with its environment, background, medical, social, and economic problems; analysis of the medical-social problem; the results obtained in solving it; and recommendations for its final solution.

Reports Given at Seminars

These reports are read by the students at two seminars during the last week of the clerkship. The seminars are attended by the members of the student section, medical instructors, social work supervisors, and social workers, and members of the clinical departments or others interested in this type of medical education. The reading of a report requires about 15 minutes, and is followed by a free discussion of both the medical and social aspects of the family problem. The other members of the section and the medical instructors and social workers are particularly active participants. The department of Psychiatry has assigned one of its members to assist the students in the study of the psychiatric problems and to participate in the final seminars. Occasionally the final reports have been presented at staff conferences of the clinical services of Bellevue Hospital.

During the five years of the Milbank grant, 304 studies have been made by the students. Of this number 212 have been made at Bellevue Hospital, 85 at the University Clinic, and the others in cooperation with the New York University Medical Group, the Visiting Nurse Service of New York, and the Community Service Society. Seven medical instructors, 19 social work supervisors, and 92 social workers have participated. The families have been those of 151 inpatients, 148 outpatients, and 4 patients in their homes. The clinical services from which the patients have been selected have included nearly every service or outpatient clinic, and the diseases of the

initial patients have covered a wide range of medical, surgical, gynecological, obstetrical, pediatric, and neuropsychiatric conditions.

Discussion

It is recognized that this type of medical-social family study has certain limitations. It covers such a short space of time that most of the problems cannot be solved during the study period, and although students are urged to keep in touch with the social workers regarding the ultimate solution of the problem, some of the students make the study so late in the year there is little opportunity for them to observe the final outcome. Some of the problems are so continuous that families have occasionally been studied a second time in subsequent years. A second defect in the program is that the studies are conducted by the department of Preventive Medicine independently of the clinical work of the student. This gives the impression that this type of study is not a part of clinical medicine, and it also suffers from the lack of major participation by attending physicians and house staff. It would be preferable to start such studies early in the third year when the students are assigned to ward or outpatients. This would enable them to study the families of patients on whom they are making clinical observations, and to follow the family as physician and adviser throughout the third and fourth years. It would also bring the attending physicians and resident staffs into closer participation in the studies. Such an arrangement has not been possible up to the present time in a large city hospital such as Bellevue because of the difficulties in organization and supervision, and the heavy case loads of the social workers.

The advantages of this type of study

Medical-Social Family Studies in Medical Education

as conducted up to the present time are that the students gain an intimate knowledge of the social problems related to illness, and of the functions and operation of medical-social work. In visiting the family in its home they meet environmental and economic conditions which they might never otherwise see. They also become familiar with a variety of community agencies whose function is to deal with such problems. These advantages would be increased if the students could follow the families over a longer period of time and if the studies could be conducted as an integral part of their clinical work.

The reaction of the students has been almost universally favorable. Many have considered, at the beginning of the clerkship, that the physician's function is to deal exclusively with the physical aspects of disease. However, they have been convinced, even in the short period devoted to the study, that good medical practice goes far beyond this limited point of view. Many of the clinical staffs have also expressed appreciation of the contribution which the studies have made to the diagnosis and treatment of the patient's condition. In some instances this has led to an increase in the referral of patients to the Social Service division earlier in their hospital stay, so that their problems could be dealt with more adequately and better diagnosis and treatment achieved. The studies have also contributed to the experience of social workers in a better understanding of the medical aspects of their patients' problems and their own important part in medical education. It has been reported frequently that the students who have gone on to internships and residencies after making such studies have shown

a greater appreciation of the importance of medical-social work.

Summary

1. A program of medical-social family studies conducted during the past five years at the New York University College of Medicine under a grant from the Milbank Memorial Fund is described. 2. These studies have had certain limitations because they were conducted in the fourth year over a period of only four weeks. They have, however, familiarized the students with the importance of dealing with problems of patients and their families which often are not apparent from the clinical study of patients in the wards and outpatient departments of a hospital. They have broadened the students' points of view, have been recognized favorably by attending physicians and resident staffs and have contributed to the efficiency of medical-social workers.

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The Place of Pathology in Medical Education

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Medical students often look upon pathology as the beginning of "real" medicine. Pathology is, however, a bridge between the preclinical and clinical studies. Because of this, the teaching of pathology must not concentrate on one basic science aspect when all are important. Further than this, it must impart good habits of thinking and reasoning which the future physician will use for the rest of his life.

Pathology, according to a definition in one textbook on the subject, is "the study of the causes, processes, and effects of disease." If medicine is the study of human biology, and I believe it is, then pathology is the study of the abnormal in human biology. Not only the abnormal in structure, but also the abnormal in function. It is not a simple extension of anatomy into the abnormal state or disease, but the application of anatomy, physiology, and chemistry to the ills of man.

This, then, is my first major premise—pathology is not just a morphologic science, but is an all inclusive use of the tools of the natural and physical sciences to the study of disease. I shall develop the implications of this later.

Medical education, or the education of the physician, is frequently viewed as a four year period in medical school. I am sure I need not belabor the point that this is also a narrow view and at least a half a century out of date. Medical science and medical practice do not stand still; hence, education for them is a continuous process. Therefore, the education of the physician begins at birth and ends

at death. It is true that we can identify little at the level of kindergarten or grammar or high school that is a direct preparation for medicine, but it is there. I have watched one boy, who I hope will some day be a physician, as he has started the study of biology during the last two years. Perhaps it is only the prejudice of a fond father, but the insatiable curiosity and the keenness for knowledge of the natural world about him, of the structure of a grasshopper, and of a myriad other things is a basic part of medical education. In college the relation is more apparent, largely because medical schools have requirements for admission.

Premedical Requirements

Although it is not a part of my topic, I cannot refrain from saying a word about requirements and premedical education. I have indicated that medical education begins at birth, but I did not and will not say that every subject, every course, every thought should be directed to this end. In fact, I would strongly urge exactly the opposite. The man or woman who has a broad foundation of knowledge is a better person, a better physician, and a better pathologist. With the great competition for admission to medical school in the last decade, a belief

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From an address at the dedication ceremonies for the University of Tennessee College of Medicine Cancer and Pathology Research Laboratories, October 4, 1951.

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has arisen that the more chemistry, physics, and biology taken in college, the greater the chance of admission. May I quote from the catalogue of Washington University School of Medicine to express my thoughts on this topic. "Medicine is concerned with such a variety of community, social, and individual problems as to demand of all entering this profession a cultural background as well as a technical education. A thorough drill in the principles of science is necessary preparation for a comprehension of the medical sciences, upon which the advances of modern medicine are based. The rest of the college work should be chosen with the object of developing the intellectual talents of the individual, rather than as required pre-professional preparation. Only to the extent that he or she acquires primary interests in a particular field of science, should a student concentrate studies in that direction."

In the four years of medicine and in the house officership the medical aspects of medical education reach their highest concentration. Thereafter in practice, in teaching, or in research there is a continuous educational level for the remainder of life.

Thus my second major premise is that the education of the physician is a life-long process, with varying components at varying periods. The highest concentration of medicine is in medical school, but this should not be thought of as the only component of medical education.

Objectives of Pathology

The student first encounters the subject of pathology in the second year of medical school. Many students look forward to this period because they say "now finally I am to see and learn something about human disease." I hope that what I have said about the totality of medical

education has been sufficient to dispel this idea. A knowledge of the metabolism of carbohydrates, the reaction of muscle to stimulation, and the structure of the cell are just as important components of modern medicine as the differential diagnosis of heart disease or how to treat cirrhosis of the liver. In fact, pathology and clinical medicine cannot be understood today without the basic facts of human biology as taught in the sciences.

Any ideas on "The Place of Pathology in Medical Education" will depend in large on the more fundamental concepts of education of the person who is discussing the subject. Let us accept for the moment that a definitive course in pathology is an integral part of medical education and that the proper place for this course is in the second year of medicine. We must then ask ourselves—What is the objective of this course? After we know the objective, we can give some attention to content, techniques, and other more detailed matters.

The objective of any course is to give the student an opportunity to learn something of the subject. To learn the facts? Yes. To learn the fundamentals? Yes. To learn viewpoint and approach? Yes. To learn habits of reasoning? Yes, with increasing emphasis.

Pathology, at least to a pathologist, does occupy the position attributed to it by some students—the bridge from pre-clinical to clinical; the first introduction to disease. Therefore, the first objective of a course in pathology, or my first conclusion on "The Place of Pathology in Medical Education", is that pathology should offer to the student in the second year course an opportunity to develop habits and techniques of reasoning and of thinking which will be useful to him then and later.

Fundamental Processes

Let me cite an example of what I mean by habits and techniques of reasoning and thinking. To me there is no essential difference in the making of a physical examination and the study of a slide or gross specimen. Each involves the same fundamental mental processes—the ability to observe objectively. It is only after the observations have been made and recorded, that the second mental process of interpretation comes into play. In interpretation the third element enters, which is not a mental process, but the accumulation of past mental processes of others—the facts as we know them at present, but not necessarily the facts of next year or even tomorrow. On the day that the first copy of the first edition of my textbook came to me in the mail, the September 1944 number of the Journal of Experimental Medicine came also. A report of a careful research project on Colorado tick fever showed clearly that what had been an accepted fact was no longer a fact and I can thus be excused for one of many errors in the textbook.

Facts are really easily learned or, if forgotten, can always be looked up in books or journals. Habits and techniques of reasoning and thinking are much more difficult to learn and cannot be looked up in books.

May I cite a more specific example of what I mean by the identity of the physical examination and of a slide or gross specimen. At the end of the first four to six weeks of the course in pathology at Washington University School of Medicine we give a practical examination. Each student receives three slides and two gross specimens as unknowns. He is asked to do three things: name the organ, describe the specimen giving particular attention to the deviations from the nor-

mal, and make a diagnosis. In grading these papers, we give a passing grade for the description alone. In other words, we believe that the first and basic thing to learn in pathology is the ability to describe objectively some object; perhaps even one that the student has never seen before, because this ability has nothing to do with familiarity or facts. To press my point by exaggeration, I would be quite as willing at this stage of pathology, to give an examination on an objective description of the room or building in which the examination is held as of a slide or specimen.

The Purpose of the Laboratory

Habits and techniques cannot be learned from books or in lectures, but only by doing. Therefore, the laboratory phase of the study of pathology should be oriented with this in mind. All laboratory courses are designed to give the student an opportunity to demonstrate to himself facts or processes which a textbook or a lecturer has said are true. Again, observations must be made, but an element of factual interpretation is now present.

A favorite expressed desire of the students, at least at all schools in which I have had the privilege of teaching, is this: "Why do you not project the slides and tell us what to look for?" My answer is that it would be "spoon feeding", one of the worst elements in education; a procedure which does more than anything else to dull the cultivation of an observing and inquiring mind. At some stage in the education of the physician we must introduce the technique of independent objective observation. The patient who comes into the office or hospital will not have a genie beside him to say, "Look, there is a black spot on the skin of the back, and firm nodules under the right arm, etc." It is the obligation of the

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teacher to plan an education for a world that exists, not for one that does not exist.

A third phase of habits and techniques concerns the ability to correlate observations. Here there is even a stronger element of facts than in the second phase. In the physical examination of a patient let us assume that the heart is enlarged, especially to the left, there is a visible pulsation in the fifth interspace in the anterior axillary line, there is a systolic murmur over the manubrium transmitted toward the apex, the pulse is of the collapsing type, and the blood pressure is 140 systolic and 0 diastolic. Each of these is a separate objective observation. However, the observations of others have been accumulated in books and tell you that these are a part of a whole and that the diagnosis is aortic insufficiency. If, in addition, the ascending aorta is dilated and the report from the laboratory on a Wasserman or Kahn test is positive you add syphilitic aortic insufficiency.

In the pathology laboratory let us assume that in the slide of the kidney, the proximal convoluted tubules are practically filled with a granular or homogeneous eosinophilic material devoid of nuclei or with only a few faintly staining nuclei or fragments of nuclei; in some tubules there are large or small masses of deeply basophilic material which can at the edge be resolved into a granular deposit; the interstitial tissue is more prominent and the fibers are separated but there is no increase of nuclei, and the glomeruli are essentially normal. Each of these again is an objective observation. The diagnosis is a profound nephrosis with necrosis and calcification of the proximal tubules. If the colon and stomach of this patient are examined and there are a necrotizing colitis and a hemorrhagic gastritis, you draw the conclusion that

the cause of the lesions is probably poisoning with mercuric chloride.

The Fundamental Task

Again, I call your attention to the similarity or identity of the mental processes in pathology and in clinical medicine. The fundamental task of the pathologist in medical education then is to arrange his course so that the students acquire habits and techniques of reasoning and thinking. The so-called teaching of the facts is of secondary importance. I say "so-called" because I am convinced that no one can be taught anything unless he wishes to learn it, and in the end result the desire to learn overshadows the drive from teaching. There are two kinds of people in educational institutions; those who are sent and those who come. In medical school I assume that everyone comes.

The content of the course in pathology is also related to "The Place of Pathology in Medical Education." Earlier I expressed the opinion that pathology is not a pure morphologic science. In different words: pathology has something, in fact a great deal, to contribute to the education of the physician beyond the structural alterations of disease.

To Teach a Concept

One thing, and the most important one, is the concept of disease as a dynamic process and not a static one. Gross and microscopic preparations tend to give static ideas. Since these are the basic tools of the pathologists, we must add something to change the static state to the dynamic state.

One technique is to think in dynamic terms. When I hear "Oh, that is just dead house pathology", my answer is that pathology or pathologic anatomy or histology are just as dead as the ganglion cells and fibers in the association path-

ways of the cerebral cortex of the observer. Let me cite a few examples. Staticly, there is a precipitate of eosinophilic granular anucleated material in Bowman's capsule. Dynamically, there was an alteration in the permeability of the glomerular capillaries, so the glomerular filtrate and urine contained plasma albumin. On fixation of the tissue the albumin was precipitated. Although the slide shows only the situation at one moment, it is easy to reason with the observation in terms of a process. Or statically, the liver cells are small, have prominent cell walls, the nuclei are small and chromatic, and the cytoplasm is stringy or clear. Dynamically this cell is deficient in protein and a chain of events of decreased food intake, and decrease in plasma albumin comes to mind.

Both of the examples cited lead me to a second aspect of dynamic concepts. Structure, after all, is nothing more than chemical compounds arranged in some definite pattern. The usual method of preparing microscopic sections precipitates the protein and dissolves out the carbohydrate and fat. Hence, all positive observations in the microscope are on precipitated protein. Special stains may reveal carbohydrate or fat. The point I wish to make is that pathology is and should increasingly give attention to chemical interpretations of structure. In teaching this means the use of special stains and particularly those in which enzymes are studied. Fundamental concepts of the nature and processes of disease today go beyond structure and include chemical alterations. It is the morphologist who has an opportunity to convey these concepts to the future physician in terms of localization in tissues, cells, and parts of cells, not just in an organ.

Experimental Pathology

A final point on dynamic concepts of pathology is experimental pathology. There is no better method to learn something of the natural course of disease than by observing disease originate and develop in an experimental animal. There are few pathologists today who are not doing some experimental research, yet the second year course is still almost pure morphology. In some schools, such as the University of Pennsylvania under Dr. Balduin Lucké, a significant part of the course is experimental work. For example, a much more fundamental concept of the process of inflammation may be gained by observing the response of the omentum to a mild irritant than by studying prepared slides. In the former the initial stage of vasoconstriction may be observed and then followed into vasodilation, margination of leukocytes, migration of leukocytes, and passage of fluid into the tissues. If there is not time or facilities to do this, movies serve as an excellent substitute.



In summary then of my thoughts on "The Place of Pathology in Medical Education" at the undergraduate level, I believe pathology should give to the student an opportunity to learn the structural and chemical alterations of disease with emphasis on the fundamental processes and not on just facts. The techniques include examination of slides and specimens, conduct of experiments, demonstrations, and reading. Above all, there should be the viewpoint of the dynamic concept of the natural course of disease.

We hear a great deal today about general education and the pure values of education. It is usually assumed that such values can come only from a study of the humanities and social sciences. If ap-

proached properly medicine, and even pathology, can become cultural subjects.

Pathology in Graduate Education

Now, just a few words before concluding, about "The Place of Pathology in Medical Education" after the undergraduate course. There are clearly two large areas in which the pathologist has an opportunity to contribute: the training of pathologists and the continuation education of all physicians. There is not time to discuss either of these fully. I shall dismiss the latter with the broad statement that the pathologist should through his routine work in the hospital and through his participation in clinics and postgraduate courses do his mite to improve health care by helping the practicing physician. The autopsy and the surgical specimen are powerful tools. They should be examined not just to establish a diagnosis, but to learn new facts, better ways of diagnosing and treating disease, and, most important, to learn some way to prevent disease and preserve health.

The training of a pathologist is the graduate phase of the undergraduate subject just as the doctorate of philosophy in history or mathematics is an extension at a higher level of the freshmen and sophomore courses.

It is my considered judgment that post-graduate medical education of the internship and residency type has deteriorated in the last decade to the point where, in some institutions, it can no longer be dignified by the term education. As secretary of the American Board of Pathology I received a goodly number of inquiries about approval of hospitals for residency training which contained a viewpoint, which to my mind, is foreign to education. May I quote verbatim from one, which is representative. "The rou-

tine work in our laboratory has increased greatly in the last few years. Our pathologist is no longer able to do the work, hence we wish to be approved so we may have a resident." If the pathologist does not have time to do the regular work, he certainly does not have time to devote to the education of a resident. This hospital does not need a resident, but an assistant pathologist.

The cause of this change in emphasis from education *of* to work *by* residents is clear and definite. The demand for hospital care and medical care has increased immensely. The importance of the laboratory in diagnosis and control of therapy has pyramided in the last decade. Please do not misunderstand me. I do not believe that a pathologist can be trained without doing the work of a pathologist, but if it is education, there must be guidance and assistance at a supervisory level.

After an autopsy is done, the more senior person must sit down with the resident and go over the organs as though this were a laboratory exercise in a university. Thereafter, there should be directed reading by the resident, not in general textbooks, but in original journals. Then, the microscopic observations should be reviewed with the senior and perhaps further reading done to clarify certain points. Thus, if an autopsy is done by a resident as an educational exercise, the senior must devote at least as much time to it as though he did the work himself. The same principles apply to the more important surgical specimens, and to many bacteriologic and chemical determinations. The establishment of a residency training program then does not decrease the need of senior staff but actually increases it.

At each succeeding level of education

there is decreasing supervision and increasing self-education, but at no point is there complete absence of guidance and help.

There is not time to discuss or even review the techniques which, as I see it, may be used to establish or re-establish postgraduate training as education. But, I would like to review one possible technique—research.

At the graduate level of education, research is an integral part of that education. Every resident should be encouraged to undertake some research project, preferably of his own choice. I say this not because I believe in the sanctity or value of published papers, but because I

believe research is a tool of education. It is a means of training the mind in habits and techniques of reasoning and thinking to which I referred earlier. For the investigator it is of no importance whether the results are published or not. He has already gotten the benefits to be derived from it. However, if the results represent a new fragment of knowledge, there should be publication for the benefit of others.

The pathologist, more than any other specialist, is full-time in the hospital. He has the opportunity to take the lead in establishing a real educational program; for his own residents and, by helping others, for all residents.

Some Thoughts Regarding the Teaching of Pathology

Anderson Nettleship*

Pathology has been taught with an emphasis on pathological anatomy and the role of infective agents in bringing about morphological changes. More attention must be given to a comprehensive approach, with less stress upon the areas of special pathology.

We may assume that pathology is taught so that the medical student better understands disease processes. Modern scientific medical practice is based on the thesis that disease produces abnormal physiomorphological alterations which must be returned to normal if the patient is to be cured. Pathology is taught so that the student may gain insight into the abnormal mechanisms. The student must understand the clinical manifestations of disease, how the underlying abnormalities cause illness and, finally, what changes the tissues undergo in their return to normal or as near normal status as possible.

In brief, it is the responsibility of pathology to teach the natural history of disease in such a well balanced manner as to give the future practitioner of medicine a sound scientific basis for such practice. With the idea firmly before us that pathology is an aspect of clinical medicine, there should not be any difficulty in deciding what to teach and how to teach pathology. The objectives are clearly dictated by materials and content. The trouble has been, however, that there has been no general agreement as to where the greatest emphasis should be placed. If we examine the pathology taught in this country during the past fifty years there is little question about where most attention has focused, namely on cellular pathology. The profundity of the cellular concept is beyond denial, its immediate translation into practical clinical medicine is difficult. On the other hand, understanding cellular concepts in the light of the natural history of a disease gives a substantial framework on which the whole course of the student's learning about medicine may be constructed.

Our task is not made any easier by the chaos and desperate confusion rained on our heads by an endless number of publications, each of which must have an evaluation of its usefulness to the student. This is almost an impossible task. The conscientious teacher of pathology struggles to keep abreast.

Pathology Is Comprehension of Disease

The medical spirit of our time is control of disease through destruction of infectious agents; physiologic readjustment and restoration to normal. The role of pathology is to translate these aspects into workable medicine.

Living pathology is comprehension of disease and the results of treatment.

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Only this kind of pathology has meaning to the student. To give morphological form and meaning to disease, is the task of the pathologist. What form the course taught in pathology should take is not nearly as important as its content. The form of the course is the result of understanding what is important in teaching.

One of our tasks is to free the teaching of pathology from dogma which has handicapped it. Another task is to make it clear to the student how the diseases of our era differ from previous eras. The one way to do this is through the historical method.

A part of the problem is how best to develop pathology and, at the same time, treat it as an intelligible emergent science for the student of disease. The great scientific flowering of pathological anatomy in Germany and advances in bacteriology on the continent still color all pathology teaching in this country. This was an advance, but within it there lies disaster, because the close causal effects of infectious agent→disease so strongly color our reasoning, that other mechanisms are obscured. The reasoning of this era produced more and more localizing concepts of disease until we moved from organs through the microscope into localizing disease in the cells. Search for disease causation has remained limited to the search for morphological cellular changes for so long that the pathologist now lags behind the clinician who has moved into fields where it seems most clear that faulty functions and secretions may modify structure, rather than always the reverse as previously taught. We have advanced knowledge about organs in health and disease, often with disregard for the patient. Knowledge about functional interrelationship of mind and the emotions on the body in health and disease brings us near completion of a cycle. We must teach disease as an abnormality of the body as a whole; it is surely an integrated mechanism in which physiological agents, such as ACTH, influence structure. We have long been familiar with larger body alterations produced by internal secretions. It now appears that even more intimate body structures and processes of inflammation and repair are influenced as well. If we do not teach functional aspects of pathology we are no longer a progressive science.

Teaching Is Clinically Correlated

Unlike most basic science instruction, pathology has been taught largely by physicians and has remained integrated and correlated with clinical instruction. In teaching, those phases of pathology which are of little or no value to the medical student in his clinical work are eliminated. Here the accusation may be made that by doing so, pathology is no longer taught as a science in its own right. Pathology taught as a so-called "pure science" is good mental discipline. If the student's mind is not disciplined by the time he reaches pathology, however, it probably never will be. Where the higher level of teaching pathology as a pure science belongs is in the resident staff and in the daily practice of the pathologist. For the student we must obviously select our material and its method of presentation. We must seek a balance

Some Thoughts Regarding the Teaching of Pathology

between that which is immediately useful and practicable and the knowledge which will give the student a sound basis of practice later in his career. The student must be made to realize that pathology is not merely a course to be passed but one whose methodology and way of looking at disease is useful to him, and will be used by him as long as he practices medicine.

The widespread introduction and acceptance of pathology and bacteriology into the teaching curriculum in the medical schools of this country, early in the century, portended a great development which has never been realized. This may be the result of having tried to teach too much textbook pathology, particularly histopathology, with almost no regard for the living subject. Such teaching makes the student feel the subject is abstruse, obscure and unreal in the very places it should be most clear and clinically applicable. The tendency to divorce clinical medicine is a serious defect and can only be remedied when the student is given opportunity to correlate his knowledge of pathology with what he sees on the wards. This, of course, necessitates the teaching of pathology during at least three years. The closest cooperation must exist between pathologist and clinical teachers. We must lay emphasis on laboratory-clinical work, i.e., autopsy performance, group case recitation and group clinicopathological discussions. Though not yet instituted, the fourth year would be an ideal time for a period of clerkship in pathology. During this time the student could pull the various skeins of his knowledge together.

New Emphases Must Be Made

The student learns mechanisms of disease, the etiological factors and causative agents and how disease is manifested in the body. Sufficient emphasis is given infectious diseases and inflammatory processes. Particular care must be given to the altered relationships of these diseases brought about through the use of antibiotics and the newer endocrine products. More emphasis should be placed upon neoplastic processes. Among major organic diseases they are second in importance. It is possible, but not practical, since our knowledge is so limited in certain fields, to draw a spectrum of the amount of time which should be spent on each disease, according to how the disease rates in the mortality tables. Thus cardiovascular-renal and neoplastic diseases rate high in the amount of time which should be devoted to their teaching.

Without specialist bias, we secure for the student a broad basic training in all medical aspects of disease, with sufficient detailed knowledge for his years of general practice. We still tend to overemphasize autopsy findings at the expense of biopsy knowledge and functional aspects. The living patient is the central theme in teaching pathology. We should definitely teach pathology technique. Technique should be limited but complete enough so that the student will understand what results the particular technique will yield. Far too often in teaching modern pathology even this small amount of technique has been neglected and the students have ended up wondering what pathology is all about.

The fields of special pathology have been overemphasized. Surgical

pathology, in particular, has been taught out of all proportion to its importance to the general practitioner. Actually surgical pathology is an extremely specialized field in which years of experience in pathology are needed before it is usable. This belongs properly to the surgical pathologist and not the third year medical student whose life is already burdened with four score new specialties. The courses in surgical pathology as taught by the best surgical pathologists are often sources of such confusion to the third year student that they obscure and confuse the basic precepts of pathology and thus make the logical application of pathology to clinical problems more difficult than it needs to be.

Close Liaison Imperative

The liaison between clinical and pathological departments should be such that the pathologist and his staff attend ward rounds and the clinician and his staff attend postmortem examinations. If this is done, the student gets a clinical interpretation of the postmortem findings. The postmortem demonstrates, in so far as possible, the changes which have existed in the living body. Clinicians, therefore, take part in the postmortem teaching. This is kept constantly alive by new residents coming into pathology from the clinical fields of medicine, obstetrics, gynecology, surgery and other specialties.

One of the most difficult of all problems in teaching pathology is the method of introducing the subject. In different medical schools throughout this country, introductory lectures range from a vague metabolic or bacteriologic inlet to thrombosis and embolism. Any number of places to begin could be chosen. For example, if one cared to present the course strictly from the historical view—i.e., give the course as though it were being done as the field developed historically; we would begin with gross pathology followed by histopathology, then inflammation (bacteriologic era), then thrombosis and embolism and, finally, more recent ideas. From the present day knowledge of pathology this is awkward and not particularly useful. Many schools divide their sophomore course into general and systemic pathology. This was first done by American pathologists and to do so in teaching is a logical development. The difficulty has been in how to start the general pathology. Shall we start with thrombosis and embolism, principles of inflammation, cellular concepts, or neoplasia? In some schools the cellular changes occupy a whole year's course! Each of these approaches lacks a common denominator. The student starts as the blind men did in examining the elephant. They do not know what it is, head, tail, leg, trunk, or what not. They have no over-all view. Having taught with each of these approaches and found them unsatisfactory, it occurred to me that the logical place to begin was with trying to show the whole outline of what the course was going to be and at the very beginning placing sufficient emphasis on methodology so that the student would be able to understand the meaning of the data which he obtains. This latter aspect has long been neglected. The natural history of each disease is given by way of organ systems only after introductory lectures which attempt to define just what pathology is. In some schools there has been almost total

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emphasis on microscopic, in others on gross pathology. Both are useful in their place but neither should be overemphasized.

Course Organization

To implement the ideas discussed, we give 50 four-hour sessions to sophomore students who have finished their course in physiology and who are just beginning clinical medicine. Each session is equally divided between lecture, gross, microscopic and conference study.

In the first session, the student is introduced to pathology by an explanation of the conduct of the course. The natural phenomena (elements) which he will encounter, the methods and principles of pathology are explained. The major methods of study, such as the autopsy, histopathology, appearance of tissues and artifacts are discussed. Autopsy demonstrations are held. Note is made of the methods of gross pathology dissection, observations and recording methods. In the microscopic session methods of observation and description are taught. In this first period only three slides are studied; one which shows a large amount of architectural distortion (kidney with advanced pyelonephritis), one which shows little architectural alteration (kidney with cloudy swelling) and a third demonstrating postmortem autolysis (pancreas). Note is made in these slides of loss of normal elements, additive elements, widespread or local change within the tissues.

In the second session, the principles of pathology are emphasized; namely, how data is compiled and what is meant by integrative level. We undertake to have the student learn how knowledge of a disease is derived from objective data and what constitutes a disease entity. Classification of disease and use of nomenclature are discussed. The laboratory sessions are devoted to explanations of how the gross and microscopic are correlated with clinical findings and environmental agents. The microscopic demonstrations are on anthracosis, edema of the lung and lobar pneumonia.

The third through the twelfth sessions cover the ageing process, the internal organization of the tissues, the principles of morphofunctional changes, recent concepts of protein-enzyme systems in relationship to structure. These then lead normally into morphological tissue alterations such as atrophy, hypertrophy, hyperplasia and neoplasia. Tissue alterations are considered from the standpoint of moderate deviation from the normal, to return to normal, to severe deviation from the normal with permanently altered tissues. Under the latter the processes of severe inflammatory and degenerative diseases are introduced. These considerations lead to an understanding of the disease entity (holistic concept).

Following the introductory sessions, the course is systemic and each of the processes studied in the first part of the course is applied and reapplied wherever it is encountered in an organ or tissue. Systemic studies are started with the endocrine system since the student is usually more familiar with this system than any other and since it has such widespread body effects.

Many Benefits Accrue

Many benefits derive from the above approach. By a combination of devices, the student learns what the normal is like, how we apply our concepts of the abnormal and all of this is directed at a study of disease entities. Particular emphasis is given the morphologic and functional changes in tissues and organs, since it is on the structural-functional ability of an organ to survive, that life is maintained and disease is manifested. The introductory program is meant to be elastic but insists upon the following: (1) emphasis on methodology and principles; (2) translation of data in terms of disease; (3) presentation from the tissue and holistic standpoint rather than from environmental agents or a cellular standpoint.

Of course, such a plan as outlined cannot be successful without very high teaching quality. The lectures must be prepared by literature research and synthesis of current modes of thought. The gross sessions are held in conjunction with the system currently being studied. In these the organs from individual cases are reviewed by small groups. The student demonstrates the gross pathology to the instructor and discussions are held about what clinical signs and symptoms the patient presented. The patient's clinical protocol is used in these discussions. Museum specimens and other case materials supplement the discussion. Ideally, the microscopic should also be available. The microscopic sections studied bear directly on the topic under discussion. The student is expected to examine the slide and then to discuss it with the instructor. He lists the tissue elements involved and how these are changed by disease. The group discussions are done in small groups and are centered around case studies. The instructor presents the case from the clinical standpoint. The students are queried on each aspect as it develops. The gross and microscopic tissues of the case are then examined and a general discussion about the disease follows.

Instructor Must Know Students

This exercise is one of the most important for the second year student. In it he learns clinical medicine via pathology. These sessions are very successful, if the instructor understands how to bring the best out of the group. He must learn which students within the group are natural group leaders. He must frame his remarks in such fashion that the student is discussing and not being examined. Once the discussion is underway, the students do much of the teaching—the best way for them to learn. The Socratic method of informed question and answer is encouraged throughout the course. Actual formal examinations are cut to a minimum and where they finally do arise are turned into learning periods as far as possible.

All students are put on 24 hour autopsy call during their pathology quarters of study and are expected to attend at least 20 autopsies and write up six in detail.

The course as outlined is termed elementary pathology and the student's knowledge of the field at this point is considered incomplete. It is only after 30 three-hour sessions held throughout their junior year that we consider

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them anywhere near competent. The course in advanced pathology is designed to bridge the gap between elementary pathology and pathology as used by the clinician. The sophomore student far too often does not find out how to apply his knowledge of pathology to the practice of medicine. The advanced course would correct this defect by: (1) formal lectures which supplement and extend the previous series and thus complete the student's "classical" knowledge of disease; (2) individual group case discussion placed in conjunction with the medicine, obstetrics, or surgery quarter in which the student is studying; and (3) junior students' clinicopathological conferences, given by the students themselves, before the whole class.

In advanced pathology the formal lectures are devoted to classical description of disease. Here pathology is taught primarily from the disease standpoint. In these lectures, emphasis is placed on findings of disease, as manifested in the living. Subjects for lecture are chosen on the basis of the major clinical disorders.

Advanced Pathology Is Dynamic

The advanced pathology course deals with pathology in dynamic units so that the student further understands the patient as a whole. For this reason, the course is made to follow very closely the work which is being done by the students in their clerkships in the various branches of medicine. At the same time the student is seeing such diseases clinically, the physiological dynamics of disease are taught from the standpoint of pathology. The student is able to follow the history and evolution of a disease, make an accurate approach to the patient's illness, through clinical examination, laboratory data, and correlated pathological findings. The results of therapy are considered, in so far as they affect the pathological picture.

We have also devised a junior clinicopathological conference. The results have been most gratifying. The students put on their own conference with but a single instructor present as referee. Some of these conferences have outshone those of their older colleagues.

The course in advanced pathology is considered essential in teaching the student the broad basic processes in pathology, in their relationship to clinical medicine. In this junior year course, elementary pathology is carried into the ramifications of the clinical years with emphasis, when necessary, on clinical pathological and surgical pathological data. The holistic viewpoint is again emphasized.

Student Must Observe to Learn

One of the most difficult aspects of teaching the pathology course in the above manner is that of making the student realize that here, for the first time, he must become an integral part in the sessions or he will not learn. No final authority is ever quoted, unless it be the final authority of observation itself. The student is made to realize that what he himself sees and knows and puts together as his own is of paramount importance. Textbook recitation will not do. Three sorts of knowledge are presented the student: (1) factual, as of observation; (2) fixed theoretical, sufficiently backed by fact

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to be generally acceptable among scientists; and (3) poorly defined or fringe knowledge of all sorts. The student must then formulate his own qualitative definition of what he will accept or reject and find useful in his own practice of medicine.

SUMMARY

If we are to improve teaching methods, we must examine critically both content and form of courses. The present thoughts which I have recorded have been brought about through an evolution of concepts about what the student is capable of learning and what we as instructors should teach him. If the field of medicine continues its rapid growth, as it has during the last 20 years, undoubtedly we shall change our ideas about teaching pathology.

Advanced medical practice today rests firmly on the development of scientific medicine which has progressed largely through pathological anatomy. This is a rational development since prevention or cure of organic disease can hardly be obtained until etiologic factors and disease mechanisms are identified. Pathological anatomy and its functional counterpart, physiological pathology, remain the bulwark and cornerstone of pathology today. Clinical data correlated with anatomical evidence at autopsies allow definition of disease entities. Once this is accomplished, clinical speculation ceases. However, in teaching pathology this is not a final objective, since the student and physician must treat disease.

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Study of Applicants

For Admission to United States Medical Colleges Class Entering in 1951-1952

John M. Stalnaker*

For the second consecutive year there was a decrease in number of applicants and applications to the medical schools. Association data also indicate that about 30% of those who were not accepted last year, reapplied for '51. Examining the records will show that, contrary to popular belief, several schools turn down relatively few applicants.

Applications for admission to medical school decreased for the second consecutive year and there were 2,359 fewer applicants this year than last. Despite this, the freshman class of 7,381 is the largest to be admitted since the proprietary medical schools were discontinued. The 80 medical schools received a total of 70,678 applications from 19,920 individuals, approximately 30% of whom had applied a year ago, were rejected, and are now reapplying after an additional year of preparatory work. Table 1 gives the comparative figures for the past four years.

TABLE 1. A Comparison of the Number of Applicants for the Past Five Years

Freshman Year	Number of Applications	Number of Individuals	Applications Per Individual
1947-48	56,279	18,829	3.0
1948-49	81,662	24,242	3.4
1949-50	88,244	24,434	3.6
1950-51	81,931	22,279	3.7
1951-52	70,678	19,920	3.5

Records on the number of applications and the number of individuals involved are compiled by the central office of the Association. The basic source data are supplied by the medical schools. The accuracy of the statistics and their completeness are dependent upon the accuracy and completeness of the reporting done by the schools.

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Each medical school sends to the Association office, as it has for many years, an individual report for each person who presents a completed application, or a completed preliminary application, if the school uses the two-step system of application. This year, 70,678 such reports were received. From these reports punched cards are prepared and alphabetized. It is possible, by inspecting these cards, to detect slight variations in names and to assemble all reports for any single individual.

Thanks are due the staffs of the medical schools, who prepare the original reports, check for any discrepancies with the counts of the central office, and check further on the spelling of names. Without their cooperation such a study would be impossible; without their friendly assistance the work would have been more arduous.

The reports of action taken on applications start to be received in September and continue to come in for the next fourteen months. The final tabulations on the number of individuals involved cannot, of course, be undertaken until all reports have been received. The great variation in the time in which reports are submitted may be accounted for partly by differences in the time of applicant acceptance by the various medical schools

and partly by their promptness in reporting to the Association. A student applying early, for September 1951 admission at either of two medical schools, might have received a report sometime in September 1950 of the action taken by one of the schools. His reply from the other school might be in May 1951, eight

months later. Having taken action, some schools report it promptly to the central office. Others delay for months before they submit a single report.

Table 2 gives the number of applications reported by each medical school and the size of the freshman class for that school. Without detailed information

TABLE 2. Number of Completed Applications Acted Upon by Each Medical School

Medical School	Size of Freshman Class*	Total Number Applications Acted on	Medical School	Size of Freshman Class*	Total Number Applications Acted on
ALABAMA	80	251	NEBRASKA	86	252
ALBANY	50	1410	NEW YORK MEDICAL	128	2879
ARKANSAS	90	185	NEW YORK UNIV.	140	2072
BAYLOR	94	755	NORTH CAROLINA	58	303
BOSTON	72	1353	NORTH DAKOTA	36	83
BOWMAN GRAY	56	855	NORTHWESTERN	128	1786
BUFFALO	72	1097	OHIO	150	517
CALIFORNIA S. F.	72	542	OKLAHOMA	101	189
CALIFORNIA L. A.	28	262	OREGON	82	350
CHICAGO MEDICAL	72	1538	PENNSYLVANIA	135	2180
CHICAGO, U. of	72	1318	PITTSBURGH	100	779
CINCINNATI	90	1016	ROCHESTER	71	1393
COLORADO	80	188	ST. LOUIS	125	1489
COLUMBIA	120	2034	SOUTH CAROLINA	70	148
CORNELL	86	1831	SOUTH DAKOTA	36	207
CREIGHTON	75	655	SOUTHERN		
DARTMOUTH	24	524	CALIFORNIA	69	685
DUKE	76	897	SOUTHWESTERN	100	470
EMORY	72	685	STANFORD	62	737
GEORGETOWN	120	1284	STATE U. of NEW YORK	150	2183
GEORGE WASHINGTON	95	1824	STATE U. of NEW YORK (Syracuse)	76	2284
GEORGIA	80	249	TEMPLE	132	2577
HAHNEMANN	105	1758	TENNESSEE	186	195
HARVARD	114	1374	TEXAS	162	510
HOWARD	75	646	TUFTS	120	640
ILLINOIS	166	752	TULANE	128	1531
INDIANA	150	568	UTAH	55	570
IOWA	120	158	VANDERBILT	52	1293
JEFFERSON	166	2592	VERMONT	50	223
JOHNS HOPKINS	75	527	VIRGINIA, U. of	72	861
KANSAS	120	313	VIRGINIA, Med. Coll. of	84	439
LOUISIANA	125	385	WASHINGTON, U. of	75	382
LOUISVILLE	100	271	WASHINGTON U., (St. Louis)	86	1795
LOYOLA	88	1037	WAYNE	76	426
MARQUETTE	103	1233	WESTERN RESERVE	80	1706
MARYLAND	104	437	WEST VIRGINIA	31	159
MEDICAL EVANGELISTS	97	319	WISCONSIN	80	173
MEHARRY	65	453	WOMAN'S MEDICAL	50	225
MICHIGAN	200	698	YALE	80	977
MINNESOTA	130	364	TOTAL:	7381	70678
MISSISSIPPI	56	216			
MISSOURI	44	156			

*Size of Freshman Class indicates the figure verified by schools for 1951 edition of *ADMISSION REQUIREMENTS OF AMERICAN MEDICAL COLLEGES*.

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about how each school defines an applicant, and other conditions of the admissions requirements, comparisons among schools are apt to be misleading. It is clear, however, that the medical schools restricting their applicants chiefly by residence requirements, have smaller groups from which to select their classes. Indeed, a few of the schools with such restrictions are, at this time, taking almost everyone who applies. A proportion of the applicants in the total group are ill-qualified for the study of medicine, have poor aca-

for a more preferred one.

Table 3 classifies the applicants by the number of applications made. Each entry in this table represents an individual. It indicates that of the 19,920 who made application, 39% applied to a single medical school and 33% of them (2,622) received an acceptance. Another 16% made application to only two schools and 38% of this group were accepted by one or both schools. An additional 12% of the total group applied to three medical schools and 45% of them were ac-

TABLE 3. Applicants Classified by Number of Applications Made and Action Taken

Number of Applications Made	One or More Acceptances			Not Accepted By Any School			TOTAL		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1	2463	159	2622	4863	345	5208	7326	504	7830
2	1131	59	1190	1817	103	1920	2948	162	3110
3	991	56	1047	1198	88	1286	2189	144	2333
4	689	36	725	908	42	950	1597	78	1675
5	510	34	544	581	36	617	1091	70	1161
6	360	20	380	471	17	488	831	37	868
7	236	21	257	387	12	399	623	33	656
8	176	8	184	262	11	273	438	19	457
9	169	7	176	224	12	236	393	19	412
10-14	339	15	354	574	15	589	913	30	943
15-19	118	5	123	188	6	194	306	11	317
20-24	37	...	37	67	...	67	104	...	104
25-29	17	2	19	19	...	19	36	2	38
30-34	3	...	3	5	...	5	8	...	8
35-41	2	...	2	6	...	6	8	...	8
TOTAL	7241	422	7663	11570	687	12257	18811	1109	19920

demic records and poor test scores. Despite this, some of this group are now gaining admission. On the other hand, the privately controlled medical schools, in spite of high tuition costs, are able to select their freshman class from among a much larger group of applicants. Of the 27 schools reporting over 1,000 applicants each, 24 are private. The other three are public institutions that do not have residence restrictions.

Of the 70,678 applications made, 9,671 were accepted, or approximately 14%. In 2,271 cases, students were reported to have declined one acceptance

cepted by one or more schools.

It would almost appear that the chances of acceptance increased with the number of applications made. However, of the 8 individuals who made a total of more than 35 applications each, 6 were rejected by all of the schools to which they applied. These 8 men, all of whom applied last year, made a total of 301 applications this year, received 299 rejections and two acceptances. The largest number of applications, 41, was reported for one man who was not accepted by any school.

Of the 19,920 individuals (5.6% of

whom were women) 38% gained one or more acceptances, and this percentage holds for women as well as men.

This year a study was made of that segment of the applicant population who had applied for medical school admission in the preceding year and were not ac-

compared with 42% for other applicants and 38% for the total group). Of the group applying to 15 or more medical schools, 47% are from this repeat group.

Table 5 gives the number of individuals receiving multiple acceptances. Most applicants (80%) who are accept-

TABLE 4. Applicants Who Also Applied Last Year Classified by Number of Applications Made and Action Taken

Number of Applications Made	One or More Acceptances			Not Accepted By Any School			TOTAL		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1	572	33	605	1547	69	1616	2119	102	2221
2	252	13	265	651	30	681	905	43	946
3	184	9	193	408	25	433	592	34	626
4	150	10	160	320	15	335	470	25	495
5	106	6	112	204	8	212	310	14	324
6	92	2	94	159	5	164	251	7	258
7	68	6	74	147	2	149	215	8	223
8	47	2	49	108	4	112	155	6	161
9	52	—	52	101	2	103	153	2	155
10-14	122	8	130	225	1	226	347	9	356
15-19	50	3	53	82	3	85	132	6	138
20-24	23	—	23	32	—	32	55	—	55
25-29	8	1	9	10	—	10	18	1	19
30-34	3	—	3	1	—	1	4	—	4
35-41	2	—	2	6	—	6	8	—	8
TOTAL	1731	93	1824	4001	164	4165	5732	257	5989

TABLE 5. Number of Individuals Accepted Classified by the Number of Medical Schools Offering Them An Acceptance

Number of Acceptances	Also Applied Last Year			Others			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
1	1524	86	1610	4248	257	4505	5772	343	6115
2	170	5	175	958	60	1018	1128	65	1193
3	29	2	31	234	7	241	263	9	272
4	6	—	6	58	3	61	64	3	67
5	1	—	1	10	2	12	11	2	13
6	—	—	—	1	—	1	1	—	1
7	1	—	1	—	—	—	1	—	1
8	—	—	—	1	—	1	1	—	1
TOTAL	1731	93	1824	5510	329	5839	7241	422	7663

cepted. A total of 5,989 individuals, 30% of the 19,920 total applicant group, fell in this class. Table 4 gives the number of applications made by this group and the action taken on their applications.

The repeat group applies, on the average, to more medical schools (4.0 as compared with 3.4 for other applicants, and 3.5 for the total group) and receives somewhat fewer acceptances (30% as

ed receive a single acceptance. At the other extreme, one man received acceptances from 8 medical schools; 83 individuals received acceptances from 4 or more schools.

The final table, Table 6, gives the number of individuals applying according to the state of residence. As usual, almost half of the applicants came from seven states. In order of the number of

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applicants these are: New York, Pennsylvania, California, Illinois, Ohio, New Jersey and Texas. Of the applicants from New York, 29% were accepted; 50%

of the Texas applicants were accepted.

The study of the test scores of this group, planned for this year, has been postponed until next year.

TABLE 6. Number of Individuals from Each State Applying to One Or More Medical Schools

State	Accepted			Not Accepted			Total		
	Men	Women	Total	Men	Women	Total	Men	Women	Total
Alabama	121	7	128	164	11	175	285	18	303
Arizona	24	3	27	43	2	45	67	5	72
Arkansas	100	9	109	72	5	77	172	14	186
California	353	30	383	773	59	832	1126	89	1215
Colorado	78	6	84	90	6	96	168	12	180
Connecticut	128	4	132	227	14	241	355	18	373
Delaware	13	—	13	21	3	24	34	3	37
District of Columbia	50	5	55	104	8	112	154	13	167
Florida	114	5	119	225	14	239	339	19	358
Georgia	130	7	137	201	4	205	331	11	342
Idaho	15	—	15	46	1	47	61	1	62
Illinois	337	23	360	529	35	564	866	58	924
Indiana	186	11	197	232	11	243	418	22	440
Iowa	140	4	144	61	4	65	201	8	209
Kansas	118	4	122	149	4	153	267	8	275
Kentucky	108	4	112	139	5	144	247	9	256
Louisiana	154	15	169	155	5	160	309	20	329
Maine	27	2	29	36	2	38	63	4	67
Maryland	112	8	120	154	6	160	266	14	280
Massachusetts	211	11	222	376	20	396	587	31	618
Michigan	290	14	304	343	18	361	633	32	665
Minnesota	158	6	164	139	10	149	297	16	313
Mississippi	96	1	97	182	8	190	278	9	287
Missouri	123	2	125	156	6	162	279	8	287
Montana	27	2	29	41	—	41	68	2	70
Nebraska	107	4	111	105	7	112	212	11	223
Nevada	3	—	3	14	—	14	17	—	17
New Hampshire	19	—	19	30	2	32	49	2	51
New Jersey	264	16	280	584	38	622	848	54	902
New Mexico	15	1	16	17	2	19	32	3	35
New York	866	66	932	2181	140	2321	3047	206	3253
North Carolina	130	4	134	244	10	254	374	14	388
North Dakota	40	4	44	40	2	42	80	6	86
Ohio	377	12	389	514	18	532	891	30	921
Oklahoma	116	4	120	98	6	104	214	10	224
Oregon	69	4	73	84	4	88	153	8	161
Pennsylvania	543	37	580	1168	58	1226	1711	95	1806
Rhode Island	28	2	30	84	4	88	112	6	118
South Carolina	90	3	93	79	14	93	169	17	186
South Dakota	40	2	42	47	3	50	87	5	92
Tennessee	219	10	229	69	2	71	288	12	300
Texas	361	24	385	371	15	386	732	39	771
Utah	66	2	68	70	5	75	136	7	143
Vermont	27	—	27	33	2	35	60	2	62
Virginia	178	10	188	184	9	193	362	19	381
Washington	125	7	132	163	9	172	288	16	304
West Virginia	67	2	69	126	14	140	193	16	209
Wisconsin	163	11	174	138	4	142	301	15	316
Wyoming	8	—	8	10	3	13	18	3	21
Canada	8	3	11	70	6	76	78	9	87
U. S. Possessions	45	4	49	174	26	200	219	30	249
Foreign	43	6	49	182	22	204	225	28	253
Not Stated	11	1	12	33	1	34	44	2	46
TOTAL Number of Individuals	7241	422	7663	11570	687	12257	18811	1109	19920

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Editorials and Comments

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The End of an Era

For the Association of American Medical Colleges, the meeting at French Lick Springs, October 29-31, 1951, marked the end of an important era. Founded in 1876, the Association has always accepted into membership *only* those medical colleges which conform to the Association's minimum standards and welcome recurrent inspection visits, to confirm the fact that the standards continue to be met.

There have been times in the history of the Association when its membership included only a minor part of the nation's medical schools. Over 500 medical schools have existed at one time or another in the United States. Only a fraction were ever admitted to membership in the Association; only a fraction could meet the Association's established minimum standards. Throughout the first 75 years of its existence, the Association has engaged in an effort to assist individual medical schools improve their teaching programs to a level which would meet the established standards.

The admission of the University of North Dakota School of Medicine into membership in the Association of American Medical Colleges on October 30, 1951 marked the end of this first era of activity. With this addition, *all* medical colleges in the United States are now in membership. There are no longer any "diploma mills," or any medical schools conducted for the personal gain of the organizers or operators. Every school listed as a medical school in the United States at the present time is a truly eleemosynary institution, has met the minimum standards established by the Association of American Medical Colleges, and has expressed a will-

ingness to be re-inspected at any time to confirm the fact that these standards are being maintained. The Association may well take satisfaction in seeing all the medical colleges of the country in its membership. The fact that our medical colleges now meet minimum standards is a fact of considerable significance.

To jump to the conclusions that all of our 79 medical schools are equally good and that a complacent attitude was, on that account, justified, would be a great mistake. Every medical school has its strong departments maintaining a fine teaching program and its weak department or departments maintaining only a mediocre teaching program. The next era in the Association's development may well be devoted to assisting what is already good medical education to become very much better. This will require, for one thing, joint action of the schools gradually to raise these minimum standards for medical education. At the same time, whatever is outstandingly good in *any* of the individual schools must be brought to the attention of *all* of the schools for their information and emulation.

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General Medical Education

During the past decade there have been two opposing ideas of the general character of medical education. One idea is to break down departmentalization of medical knowledge and to focus attention increasingly on the patient as a whole and on the patient as an individual human being. The other idea is to expand the compartmentalization of teaching. For example, all deans have in the last few years received questionnaires from many different specialty

groups—industrial medicine, legal medicine, oncology, chest diseases, etc. There is the clear implication that each of these subjects is important and that, for most, there should be a definite and separate course for medical students. More recently there have been requests or demands for integrated or separate teaching of knowledge related to atomic warfare and civilian defense.

There is little doubt that each of these subjects is important. There is also little doubt that the scope of medicine is widening and that medical schools must adapt themselves to the broadening horizon and changing concepts. On the other hand a proper consideration of the place of each facet of medical care and service must be evaluated in terms of the primary objective of undergraduate medical education in contrast with postgraduate medical education.

If the primary objective of the undergraduate course is to give medical students an opportunity to learn the basic facts which should be known by all physicians, then separate lectures or courses on each of the manifold specialties and subspecialties of medicine have little or no place in the four years. New material may better be assimilated into present courses rather than given in a new course.

Further, if medical education is to continue to be scientific, professional, graduate education, there must be emphasis on attitude, concepts etc., processes, rather than on isolated facts.

These two thoughts dictate that the response to the two opposing ideas of departmentalization and of integration should be one of general support of integration.

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Medical Schools and Teaching Hospital Relationships

One of the striking features of medical education in America is the diversity of its medical schools from the point of view of tradition, financial support, and pedagog-

ical method. Some schools had their origins within established universities and some stemmed from religious sects; some were originally commercial ventures operated for profit. Some were devoted to the teaching of medical theories now outmoded, such as homeopathy; one existing school was established solely for the education of women, two others primarily for Negroes. Almost half are state or municipal schools; the remainder are privately supported. The budgets of the schools vary from less than half a million to more than two million dollars a year.

It is remarkable in view of this diversity that the quality of training across the country is as uniform as it is. The accrediting agencies have fortunately placed their emphasis on the ends achieved and have encouraged each individual school to work out its own solution to its problems in accordance with the local situation.

One of the functions of our Association through the Journal of MEDICAL EDUCATION, is to inform medical educators of new techniques, whether they be pedagogical or administrative, which have met with success in a particular school.

Among the areas of importance to medical education about which little has been published is the working relationship between the medical schools and their so-called teaching hospitals. In view of the fact that almost half of the time of the undergraduate medical student is spent in these hospitals, it is rather astonishing that more attention has not been given to this area. All sorts of patterns of cooperative agreements exist between schools and hospitals, some operating with conspicuously fruitful results for both parties and others with the opposite effect.

Perhaps the most glaring contrasts may be found in the relationships of privately supported medical schools to municipal and county hospitals. In spite of the splendid examples in New York City, Cincinnati, Cleveland, Los Angeles, and others, there remain city hospitals whose attitude toward

their affiliated medical schools leaves much to be desired. Although in most instances the chief obstacle is ignorance rather than political chicanery, it is not easy for an individual school with an obvious axe to grind, to educate the city fathers in these matters. Has not the time come for all this information to be brought together in a form which would be useful to both the schools and the hospitals who are struggling to improve their relationships?

Granting that some of the most successful hospital-medical school relationships are based on unwritten gentlemen's agreements and that no legal contract can obviate the necessity of mutual trust and forbearance, and granting that each school and hospital faces an individual problem which must be solved in a particular way, nevertheless the instruments by which the successful working relationships of various schools and hospitals have been spelled out have had no small share in that success. Here is a need and an opportunity to bring together a body of data which would give measurable assistance to this important segment of medical education, facilitate the provision of improved professional standards in a number of large hospitals, and promote better understanding between community leaders and medical educators.

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The Internship Matching Plan

The National Interassociation Committee on Internships at its meeting in Chicago on November 9, 1951, after listening to student representatives, modified the cooperative matching plan for internship appointment to include the internal procedure known as the Boston Pool plan. The chief advantages of this plan are: it allows the student to take as many "flyers" as he wishes; it removes a student from the hospital accepted list only if that student is accepted by a hospital he has rated higher on his preference list, and then moves the

next student on that hospital's list into the group it has accepted. The Committee decided to go ahead with the modified plan, on schedule.

At present all but 16 of the approved hospitals have agreed to cooperate in the plan and over 5,740 students have agreed to take part.

Students have been mailed a confidential rating blank on which they are to indicate their choices among the internships for which they have applied. This blank is scheduled to be submitted on or before January 7, 1952 to the central office. Hospitals will then be sent an alphabetical list of their applicants and will indicate on this list their preference order among this group applying to them.

The matching plan preserves the freedom of choice by both hospital and student as well as their bargaining rights. It does not give interns to hospitals which do not have applicants. It does not interfere with, but rather gives effect to, the preferences of both hospitals and students. The Committee office serves as a clearing house for handling the administrative details.

The success of this system depends upon the good faith of both students and hospitals. While there is some suspicion, understandably enough, on the part of both, most students and most hospitals are making a sincere effort to cooperate fully and make the plan succeed. Its advantages will be more apparent after the results are known, although, of course, many hospitals will be disappointed because some 5000 internships will be left vacant no matter what system is used.

A few hospitals have made an effort to take advantage of the difficulties associated with this new program. Two hospitals, for example, after having agreed to participate and having had the advantage of the publicity of cooperating with the program, have gone ahead to sign interns immediately. Means of obtaining cooperation from such hospitals must be found.

Audiovisual News

The Ciné-Clinics: An Important Innovation in the Teaching of Surgery

At the 1950 Boston Clinical Congress of the American College of Surgeons, Davis and Geck, Inc. presented a significant new development in audiovisual teaching: the Ciné-Clinics. An improved and expanded program of these clinics was developed for the November 1951 Clinical Congress of the College in San Francisco. This group of 39 motion pictures in color represents both an important innovation and an unusual opportunity for experimentation in the teaching of surgery by means of audiovisual tools.

The Ciné-Clinics are the logical outgrowth of the evolution of the extensive Davis and Geck Surgical Film Library, developed under the supervision of Mr. C. Carroll Adams, Director of Professional Relations. Over 22 years, the Surgical Film Library has been assiduously compiled from clinical cinematography of operative procedures. Such films usually, even characteristically, have recorded a single surgical case wherein some distinguished surgeon performs, for other surgeons, a procedure for which he is noted. Films of this type have an honorable, probably sharply delimited, but as yet poorly defined place in the armamentarium of medical teaching motion pictures.

Since the time of Doyen in 1898, films of this general type have evolved technologically from silent black and white films with titles, to colored silents, to color with sound. On occasion, the narrator of these newer sound films has been the author-surgeon; and through his authority the film has gained force and a certain historical value, although often it has suffered in voice quality.

At the time of a convention of surgeons it is conceivably possible to bring together a large number of author-surgeons to narrate their films in the flesh. With such a group of surgeons present, a great cumulative impact can be achieved, plus a notable

gain in the discussion elements which ideally can precede and follow a film showing. The new competition of color television, which also has largely focussed on the easy and obvious visual continuities of surgical performances, and which has possessed the charm of novelty and the force of immediacy, could only be answered by similar immediacy in the persons of authors, backed by that selective preparation which is possible only in the edited motion picture.

The Ciné-Clinics were born in this stream of current events. They are one answer to the need for convention demonstration and teaching which will challenge the interest of and be of benefit to ever larger groups of specialists thirsty for the new knowledge which has been pouring out of the laboratories and clinics. While these films were made for a spot convention purpose, it is important to point out that they also fit the distribution objectives of the Surgical Film Library, and the year-round demands of certain surgical teaching.

The Ciné-Clinic on Boston Surgery consisted of 18 films planned by the College of Surgeons and the Davis and Geck Company. Each film was shot beforehand in Boston by Davis and Geck personnel, edited without explanatory titles, and projected with the author-surgeon as the voice of narration. The program was presented on two successive mornings to overflow audiences. The advantages of this method of presentation were immediately obvious, both to the surgeon-narrator who could confine his efforts to being a teacher without the strain of actual surgery, and to the audience who received only the selected important parts of a surgical demonstration. The reaction of the surgeons in the audience and on the platform was overwhelmingly favorable. Later, thirteen of the author-surgeons were given opportunity to narrate a sound track for those films felt to be of sufficiently broad interest for inclusion in the Davis and Geck Library. These sound-on-film versions of the Boston Ciné-Clinic were then shown with important

success at the 1951 Sectional Meetings of the College and at other medical meetings.

The 1951 Ciné-Clinic of Western Surgery was an expanded program of 21 new films, shown on five mornings at San Francisco. Subjects and surgeons were chosen by the College from the breadth of the West, from Dallas to Vancouver. Both were selected ten months in advance, so that the choice and filming of each case was vastly improved. Greater audience numbers could attend at this Congress, and there was a repeat performance of ten of the more significant new films. Unfortunately, for many reasons it was found impossible to arrange for discussion and audience participation. However, the basic pattern and appeal were the same. Each motion picture showed some advance in surgery, with the author-surgeon supplying the narration in person. Fifteen of the author-surgeons have supplied narrations for sound recording, while three of the films will remain silent with titles.

It is undeniable that at *conventions* the Ciné-Clinics have provided an effective type of teaching, *for surgeons by surgeons*. The popularity of somewhat similar motion picture programs conducted for the past three years by the American Academy of Orthopedic Surgeons at their annual meetings seems to confirm this conclusion beyond a doubt. All well-conceived, well-publicized, and well-managed film programs at current conventions have been well attended; but particularly this has appeared to be true of those conventions where physicians have learned newer techniques, to their own direct benefit in teaching, prestige, and pocket.

However, the year-round classroom and staffroom teaching which is possible with such blocks of films as these has not yet been clearly demonstrated. There is a great need for a series of trials designed to show the values of these surgical operative films. This group of 28 up-to-date, convention-tested films would appear to offer an opportunity to instructors in surgery both in the medical colleges and in graduate training.

Experiments in surgical teaching by audiovisual means concern a number of different audiences. Medical students are one primary target, a group to be taught the

principles of surgery rather than its detailed technology (so rich in many of these films). Yet the advances in surgery shown, and the often masterful performances of the surgeons, might well be of use in surgical correlational conferences; for demonstrations of surgical anatomy; in brief excerpts for showing key elements of a surgical approach; or perhaps as grist for television programs such as that which the University of Kansas has begun.

The shortcomings of these films, for the medical student, center about the films' assumption of a wide audience knowledge (a fair enough assumption when the audience consists of surgeons), the almost constant failure to achieve the real visual continuity essential for beginners in surgery, and the frequent confusing disassociations between picture and words. These shortcomings may conceivably be overcome by a skilled and disciplined surgical instructor, who may, in order to achieve quite different teaching ends, elect to turn off the sound track to narrate himself, who may use only portions of the films, or who may stop and start as he sees fit to fill in gaps and make clear whatever is confusing.

For the staffroom of the teaching hospital, the films offer subject matter to support the programs for the surgical staff and for intern and resident training. Evaluative materials on films of this type are, as a general rule, unavailable. The responsibility is therefore upon the borrower to select and preview. Since the film contents are highly specialistic, all utilization with surgical internes and residents must be most thoughtfully considered. "Assigned films" for residents are as logical a development as "assigned reading" in the planned training of interns and residents, in order to demonstrate the surgery of the masters and the inept alike. It would be extremely valuable to study the effect of these 28 films, or combinations with films of similar type, (of which there are an inordinate number), in hospital training programs in surgery. Such studies would aid greatly in defining the real role of these heretofore misconceived and misused films for graduate medical instruction.

For reference, the 30 new Davis and Geck films of this 16 month period are

listed below in rough categories en bloc with their authors. All the 1951 films will be available for utilization by July 1, 1952, for incorporation into 1952-53 training programs. All are available on free loan from Davis and Geck Surgical Film Library, 57 Willoughby Street, Brooklyn 1, New York.

D.S.R.

Cardiac and Vascular Surgery

Pulmonary Valvulotomy

(sound) John C. Jones, 1951

Surgical Correction of Auricular and Ventricular Septal Defects

(sound) Charles P. Bailey, 1951

Splenorenal Anastomosis for Portal Hypertension

(sound) C. Stuart Welch, 1950

Portacaval Shunt (sound) John P. Heaney, 1951

Low Thigh Amputation for Peripheral Vascular Disease

(silent) John B. Adams, 1951

Gastro-Intestinal Surgery

Thoracic Partial Gastrectomy and Esophagectomy for Carcinoma of the Lower Esophagus

(sound) Richard H. Sweet, 1950

Reconstruction of the Esophagus by Jejunal Transplant

(sound) Ross Robertson, 1951

Subtotal Gastrectomy for Duodenal Ulcer Perforating into the Pancreas

(sound) Joel W. Baker, 1951

Cholangiojejunostomy for Strictures of the Common Duct

(sound) Wm. P. Longmire, Jr., 1951

Operative Treatment of Hirschsprung's Disease

(sound) Orvar Swenson, 1950

Resection of Right Colon for Carcinoma with End-to-End Anastomosis

(sound) Arthur W. Allen, 1950

Resection of Carcinoma of Rectosigmoid with Primary Anastomosis

(sound) G. V. Brindley, 1951

Abdomino-Perineal Resection for Carcinoma of Rectum

(sound) Richard B. Cattell, 1950

Neurosurgery

Uretero-Arachnoid Anastomosis in the Treatment of Hydrocephalus

(sound) D. M. Matson, 1950

Chiari Malformations

(sound) C. Hunter Shelden, 1951

Surgery of Face and Neck

Correction of Cleft Lip. (Demonstrating modification to prevent depression deformity of floor of nostril)

(silent) T. G. Blocker, 1951

Supraomohyoid Neck Dissection for Carcinoma of Lip

(sound) Grantley W. Taylor, 1950

Parotidectomy: Superficial Lobectomy for Mixed Tumor with Preservation of the Facial Nerve

(sound) Robert A. Wise, 1951

Orbital Recession Operation for Malignant Exophthalmos

(sound) H. C. Naftziger, 1951

Surgical Management of Primary Hyperthyroidism with Subtotal Thyroidectomy

(sound) Frank H. Lahey, 1950

Carcinoma of the Thyroid. Thyroidectomy and Neck Dissection

(sound) R. Lee Clark, Jr., 1951

Excision of Thyro-Glossal Fistula

(sound) Conrad J. Baumgartner, 1951

Broncho-Pulmonary Surgery

Segmental Pulmonary Resection

(sound) Richard H. Overholst, 1951

Pneumonectomy

(sound) Everts A. Graham, 1951

Obstetrics and Gynecology

Outlet Forceps Delivery Under Pudendal Block

(silent) Herbert F. Traut, 1951

Abdominal Complete Hysterectomy with Right Salpingo-Oophorectomy

(sound) William F. Mengert, 1951

Radical Operation for Carcinoma of the Cervix

(silent) Joe Vincent Meigs, 1950

Miscellaneous Surgery

Use of the Artificial Kidney

(sound) John P. Merrill, 1950

Ureteral-Intestinal Anastomosis by Submucosal Tunnel and by Open Method

(sound) Frank Hinman, 1951

Hypertension Due to Pheochromocytoma

(sound) Reginald H. Smithwick, 1950

MFI Name Changed

The Executive Council of the Association of American Medical Colleges has decided that the name of the Medical Film Institute be changed to Medical Audio-Visual Institute. The change was made in order to emphasize the broad basis of the audio-visual services and interests of the Association. Under its new name, the Medical Audio-Visual Institute will continue to expand its broad role in medical education.

1st Permanent Color TV in Medical School

Regular surgical teaching with color television was begun on November 30, 1951, at the University of Kansas School of Medicine. Permanent installation of CBS-Remington Rand Vericolor color television has extended the school's pioneering experiment in the teaching of surgery, which was begun two years ago with a black and white system. Over an eleven week period a schedule of 52 programs on the principles of surgery has been arranged for the teaching of junior students. The programs will be conducted on an hour and a half, five day per week basis.

A postgraduate color television course in surgery has been scheduled for January.

National Cancer Institute Grant

The Medical Audio-Visual Institute received, effective December 1, 1951, a grant of \$25,000 from the National Cancer Institute. Title of the project for which the grant was made is "The Study, Production and Experimental Utilization of Short Motion Pictures for the Teaching of Fundamental Oncology in the Medical Schools."

Purpose of the project is to begin to explore the production and utilization of a large number of "slides in motion", short motion pictures designed expressly for the medical school classroom and instructor. The project will support the work

of the Cancer Coordinators of the medical and dental colleges. It will also endeavor to examine certain of the criteria for the economical development of departmental and medical college film libraries.

3-Dimensional Motion Pictures in Surgery

A new type of three-dimensional color cinematography was demonstrated at the Clinical Congress of the American College of Surgeons, held on November 4, 1951 at San Francisco. A total gastrectomy, performed by Dr. Samuel Marshall of the Lahey Clinic, Boston, was the subject of the demonstration which was sponsored by Ethicon Sutures Laboratories. Developed by Mr. Floyd Ramsdell of Worcester (Mass.) Films, the new technique of stereoscopic cinematography and projection promises an important improvement in surgical instruction.

However, despite the improvements in method, there remain very serious mechanical, optical and cost difficulties which bar wide application at this time. The mechanical progress demonstrated at San Francisco does, apparently, represent an advance in technology in the now more than ten year old technique.

1st Coast-to-Coast Medical Color TV

A transcontinental demonstration of medical color television has pushed the potential for national graduate medical education programs one step closer to realization.

The telecast originated on December 7 from the Clinical Section of the American Medical Association, under the sponsorship of Smith, Kline and French, Inc., pharmaceutical manufacturers. This is another audiovisual milestone which the Philadelphia firm has pioneered. The program consisted of a surgical performance from Los Angeles General Hospital by Dr. John C. Jones, associate professor of surgery, University of Southern California.

The December 7 telecast was relayed by American Telephone and Telegraph microwave to invited audiences at the University of Chicago Medical Center, and at the CBS studios in New York City.

The program, although costly, demon-

strated the technical feasibility of national television linkages. While its value for professional education has yet to be appraised, there is no doubt of its worth for lay health informational purposes.

Institute Members Prepare Script

Mr. George C. Stoney and Dr. V. F. Bazilauskas, consultant members of the Institute staff, prepared the script of one of the *American Inventory* series of experimental adult educational television programs. The program, entitled "Medical Education 1951", was presented November 4 under the joint sponsorship of the National Broadcasting Company and the Alfred P. Sloan Foundation. Mr. Stoney and Dr. Bazilauskas also assisted in production. The National Fund for Medical Education participated with the Medical Audio-Visual Institute in development of the presentation.

A large number of interested individuals and medical organizations assisted in production by supplying materials for the telecast. The kinescope is available for reference showings and local telecasts.

Specialty Film Lists Available From AMA

The Committee on Medical Motion Pictures of the American Medical Association has prepared lists of medical motion pictures designed for the use of medical teachers and specialists. The lists range from Anatomy to Urology and include a large number of motion pictures from all sources.

Along with film data, each title has film content abstracts. These are evaluative when based upon JAMA reviews.

Audio-Visual Trainee

Dr. Floyd S. Cornelison Jr., a resident in psychiatry at Massachusetts Memorial Hospital, is currently undergoing a joint audio-visual and psychiatric training program. Dr. William Malamud, head of the department of psychiatry and neurology, Boston University School of Medicine, is supervising the program in conjunction with the Medical Audio-Visual Institute.

Besides his residency in psychiatry, Dr. Cornelison is simultaneously undertaking methodical collateral schooling in motion picture technology at Boston University.

His years of professional photographic experience qualify him for this one year of combined training. Upon completion of the program, Dr. Cornelison will act as a skilled liaison person in dealing with special audiovisual problems of psychiatric teaching.

Notice of New Film Releases

These notices of new releases are not reviews, but merely indicate, in advance of appraisals, new films of probable value to medical school teachers.

Endoscopic Aspects of Diseases of the Trachea

Data: 16 mm, color, silent, 575 ft. **Sponsor and Distributor:** The Jacques Holinger Memorial Fund, 700 North Michigan Avenue, Chicago 11, Illinois. **Sale or Rental, Author and Producer:** Paul H. Holinger, M. D.; and Kenneth C. Johnston, M. D., Chicago. **Intended Audience:** Broncho-esophagologists, thoracic surgeons, physicians, medical students.

This film presents selected endoscopic motion picture views of various pathologies of the trachea, as a series of cinematic illustrations.

Foreign Bodies in the Air and Food Passages

Data: 16 mm, color, silent, 750 ft. **Sponsor and Distributor:** The Jacques Holinger Memorial Fund, 700 North Michigan Avenue, Chicago 11, Illinois. **Sale or Rental, Author and Producer:** Paul H. Holinger, M. D.; and Kenneth C. Johnston, M. D. **Intended Audience:** Broncho-esophagologists, physicians, medical students.

A film presenting selected endoscopic cinematography of foreign bodies in the air and food passages as seen in the bronchoscopy clinic.

The Clinical Uses of Hyaluronidase

Data: 16 mm, color, sound, 30 minutes. **Sponsor:** Wyeth, Inc.; **Producer:** Worcester Films, Worcester, Mass.; **Scientific Direction:** Columbia University College of Physicians and Surgeons at Presbyterian Hospital, New York, N. Y. **Distributor:** Wyeth, Inc., Philadelphia 2, Pa. **Loan, Intended Audience:** General practitioners, general surgeons, medical specialists of many kinds. **Auxiliary Material:** The narration with selected illustrations is available as an accompanying booklet.

This is an illustrated film report showing many of the clinical applications of a new enzyme which acts as an adjunct in a multitude of therapeutic and diagnostic procedures.

Summaries of Film Reviews

These brief notes on some motion pictures on cytological and clinical aspects of neoplastic diseases are intended to afford an offhand idea of the desirability and use of the films under review. They are drawn from the detailed evaluative reviews prepared by the Medical Audio-Visual Institute, which are available through the Association of American Medical Colleges. Anyone contemplating a showing of these films, as well as anyone looking to the production of similar or related films, would be well advised to obtain the detailed reviews for study.

Dividing Cancer Cells in Vitro

16 mm (and 35 mm), black-and-white, silent, 160 ft., 7 min.

Year of Production: 1931-1933; **Country of Origin:** U. S. A. **Author and Producer:** Dr. Warren H. Lewis.

Distribution: Wistar Institute of Anatomy and Biology, Woodland Avenue and 36th Street, Philadelphia 4, Pa. **Sale:** \$10; **Rental:** \$2.

Summary: This is a film record of dividing sarcoma cells in tissue culture. Technically it is excellent and clearly presents the phases of bipolar and tripolar mitoses. Lacking explanatory text, the film should be accompanied by a commentary from a qualified cytologist when shown to student audiences.

Audience: Cytologists, undergraduate and graduate students in biology, medical students.

Tumor Cells and Macrophages in Tissue Culture, Rat Sarcomas and Carcinomas

16 mm (and 35 mm), black-and-white, silent, 373 ft., 16 min.

Year of Production: 1929-30; **Country of Origin:** U. S. A. **Author and Producer:** Dr. Warren H. Lewis.

Distribution: Wistar Institute of Anatomy and Biology, Woodland Avenue and 36th Street, Philadelphia 4, Pa. **Sale:** \$20; **Rental:** \$3.50.

Summary: This is a film record of rat sarcoma and adenocarcinoma cells and macrophages as seen in tissue culture. It gives an excellent illustration of phagocytic activity of living cells and of some cytological criteria of malignancy. Two mitoses are also shown. The film is suitable as study material for cytologists, as well as for use in teaching if accompanied by commentary from an expert.

Audience: Medical students, undergraduate and graduate students in biology; cytologists.

Normal and Abnormal White Cells in Tissue Cultures

16 mm (and 35 mm), black-and-white, silent, 388 ft., 16 min.

Year of Production: 1939; **Country of Origin:** U. S. A. **Authors:** Dr. Warren H. Lewis and Dr. Margaret R. Lewis, in cooperation with Dr. Arnold R. Rich and Dr. Maxwell M. Wintrobe; **Producer:** Dr. Warren H. Lewis.

Distribution: Wistar Institute of Anatomy and Biology, Woodland Avenue and 36th Street, Philadelphia 4, Pa. **Sale:** \$25; **Rental:** \$4.

Summary: This is a film record of the morphology, motility and comparative features of normal and abnormal white blood cells in tissue culture. Normal mature and immature blood elements are identified, followed by views of cells from tissue cultures of neoplasms of the blood-forming tissues. An excellent illustration of the amoeboid motion of white cells is presented. The film is suitable for showing to hematologists, and to medical students if accompanied by a commentary from a specialist.

Audience: Hematologists, pathologists, and medical students.

Cancer: The Problem of Early Diagnosis

16 mm, color, sound, 1,113 ft., 31 min.

Year of Production: 1949; **Country of Origin:** U. S. A. **Sponsors:** American Cancer Society and National Cancer Institute, U. S. Public Health Service, Federal Security Agency; **Producer:** Audit Productions, Inc., New York.

Distribution: American Cancer Society, 47 Beaver Street, New York 4, N. Y. **Sale:** \$150; State Health Departments or State Cancer Societies, **Loan:**

Accompanying Materials: Booklet, "Cancer: The

Audiorvisual News

"Problem of Early Diagnosis," containing synopsis of film and suggestions for use.

Summary: This film presents cancer as a problem of early diagnosis. It discusses five common forms of cancer—breast, cervix, stomach, lung, and large intestine—showing in each case how early diagnosis and treatment have reduced mortality figures. The message is important and well-organized; its presentation is handled with skill and attention to detail. Aimed primarily at the family physician, the film succeeds in describing for him the scope of his problem, in spite of a rather impersonal and statistical approach.

Audience: General practitioners, residents, interns, medical students (third and fourth years).

Breast Cancer: The Problem of Early Diagnosis

16 mm., color, sound, 1,230 ft., 34 min.

Year of Production: 1949; **Country of Origin:** U.S.A.; **Sponsors:** American Cancer Society and National Cancer Institute, U. S. Public Health Service, Federal Security Agency; **Medical Advisers:** Drs. Frank E. Adair, W. Edward Chamberlain, Murray M. Copeland, Earle T. Engle, and Charles F. Geschickter; **Producer:** Audio Productions, Inc., New York.

Distribution: American Cancer Society, 47 Beaver Street, New York 4, N. Y.; **Sale:** \$146.20; State Health Departments or State Cancer Societies.

Loan: **Accompanying Materials:** Booklet "Breast Cancer: The Problem of Early Diagnosis."

Summary: This is a survey of cancer of the breast, covering normal breast development, clinical pathology of breast cancer, and examination of the breast. The film stresses early diagnosis and treatment in lowering mortality figures. Accurate in detail and skillfully produced, the film succeeds well in conveying its message, and in places achieves considerable insight into the doctor's problems.

Audiences: General practitioners, gynecologists, residents, interns, medical students, nurses.

Breast Self-Examination

16 mm., color, sound, 560 ft., 15½ min.

Year of Production: 1950; **Country of Origin:** U. S. A.; **Sponsors:** American Cancer Society and National Cancer Institute, U. S. Public Health Service, Federal Security Agency; **Producer:** Audio Productions, Inc., New York; **Direction:** Alexander Gansell; **Script:** Earl Pierce; **Camera:** Peter Glushanok; **Editors:** Murray Margolin.

Distribution: American Cancer Society, 47 Beaver Street, New York 4, N. Y.; **Sale:** \$52.10; Local or State Cancer Societies, State Health Departments, or the four regional depots of Association Films, 347 Madison Avenue, New York 17, N. Y.; 3012 Maple Avenue, Dallas 4, Texas; 206 South Michigan Avenue, Chicago 3, Ill.; 351 Turk Street, San Francisco 2, Calif.; **Loan:**

Accompanying Materials: Booklet, "Breast Self-Examination," containing a synopsis of the film and suggestions for its use.

Summary: This well-produced film is a straightforward and well-defined attempt to describe a simple method for self-examination of the breast and to encourage women to make this examination a regular health habit. This message has been phrased carefully and with good taste so as to stimulate interest without creating

fear, and to encourage every adult woman to carry out the advised plan under the guidance of her doctor. The film should be accompanied by a talk by a prepared physician and should preferably be shown in conjunction with available pamphlet material. It will be of interest not only to general audiences of women, but also to medical students and doctors, who have a role in the program described.

Audience: General audiences of adult women; nurses, medical students, physicians.

Gastrointestinal Cancer: The Problem of Early Diagnosis

16 mm., color, sound, 1,200 ft., 33 min.

Year of Production: 1950; **Country of Origin:** U. S. A.; **Sponsors:** American Cancer Society and National Cancer Institute, U. S. Public Health Service, Federal Security Agency; **Medical Advisers:** Drs. Ross Golden, Gordon McNeer, George Pack and Owen Wangersteen; **Producer:** Audio Productions, Inc., N. Y.

Distribution: American Cancer Society, 47 Beaver Street, New York 4, N. Y.; **Sale:** \$138.28; State Health Departments or State Cancer Societies; **Loan:**

Accompanying Materials: Folder, "Gastrointestinal Cancer—A Summary for Physician"; booklet, "Gastrointestinal Cancer—The Problem of Early Diagnosis."

Summary: A survey of cancer of the esophagus, stomach, small and large intestines and rectum, reviewing salient points in diagnosis and stressing early discovery and treatment in lowering mortality figures. Accurate in detail, skillfully and conscientiously produced, the film makes its point in spite of a somewhat static and statistic-conscious treatment.

Audience: General practitioners, residents, particularly of internal medicine, interns, medical students in their clinical years.

Uterine Cancer: The Problem of Early Diagnosis

16 mm., color, sound, 750 ft., 21 min.

Years of Production: 1950-51; **Country of Origin:** U. S. A.; **Sponsors:** American Cancer Society and National Cancer Institute, U. S. Public Health Service, Federal Security Agency; **Medical Advisers:** Drs. George N. Papanicolaou, Joe Vincent Meigs, R. Gordon Douglas, Locke A. McKenzie, Eugene P. Pendergrass; **Producer:** Audio Productions, Inc., New York.

Distribution: American Cancer Society, 47 Beaver Street, New York 4, N. Y.; **Sale:** \$88.20; State Health Departments or State Cancer Societies; **Loan:**

Summary: A simple, direct and handsome teaching film on the early diagnosis of uterine cancer through visualization of the cervix, bimanual palpation, tissue biopsy where indicated, and routine vaginal and selective cervical smears. The film is science-oriented, rather than patient-oriented. The emphasis placed upon cytological diagnosis and upon the hope of discovery of the controversial intra-epithelial carcinoma is viewed, at least by pathologists, with some concern for its scientific and administrative implications.

Audience: General practitioners, residents, interns, medical students in their clinical years.

Book Reviews

After careful consideration, the Journal Committee has decided that printing the book reviews unsigned will promote maximum objectivity. Reviewers will continue to be carefully selected, of course, for their special qualifications for reviewing particular books.

OUR ERROR: The September '51 issue, Book News section, assigned Drs. Conger Williams and Lawrence B. Ellis to Boston University. This was an extremely misleading appointment, since it came about through an error! Dr. Williams and Dr. Ellis are members of the faculty of the Harvard Medical School. Our apologies to Dr. Williams, Dr. Ellis, Harvard and Boston.

Spatial Vector Electrocardiography

Clinical Electrocardiographic Interpretation. Robert P. Grant, M.D., National Heart Institute; and E. Harvey Estes Jr., M.D., U.S. Naval Hospital, Bethesda, Md. The Blakiston Company, Philadelphia, New York, Toronto, 1951. 41 Figures. 149 pp., including Bibliography & Index. \$4.50.

This rather short book (149 pages) represents summary and unification of the material presented by these authors in their published papers and their previous monograph published by Emory University. The authors have managed a very clear presentation of an extremely difficult subject. This is the chief purpose of the book which does not pretend to be a reference work. It is also noteworthy that the authors have clearly stated the limitations of their approach to vector methods as well as the limitations which apply to the field in general. The reviewer feels strongly that whether or not the reader agrees with all principles presented he will benefit greatly by reading the book. Also, an understanding of the principles involved will lead to a better understanding of electrocardiography. Since more and more published work will be forthcoming in vectorcardiography, this book will serve as an excellent background to that study. It is recommended without reservation.

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Rosenau's Preventive Medicine and Hygiene—7th Edition

Kenneth F. Maxcy, M.D., Dr.P.H., Professor of Epidemiology, Johns Hopkins University School of Hygiene and Public Health; with the assistance of 26 Contributors. Appleton-Century-Crofts, Inc., New York, October, 1951. 131 Illustrations. 1447 pp., including Index. \$14.00.

This textbook, which has been a constant source of reference for all public health workers since 1913, has undergone almost complete rewriting in this, its 7th Edition. Great credit is due Dr. Maxcy for the way in which he has picked up where Dr. Rosenau stopped sixteen years ago, eleven years before his death. There will be a few who will miss the chapters on soil, on disinfection and on ocular hygiene, and more will find the 13 page index of the revised volume incomplete, as compared with the 50 page index of the 6th Edition. However, most

public health workers and students of public health will note the large amount of new material added and will be pleased with the new edition. It is more a textbook and perhaps less an encyclopedia than previous editions have been and this change has improved its readability and attractiveness. In the opinion of the reviewer this 7th Edition lives up to the reputation of its predecessors and rightfully claims a place on the desk of every student of public health and every public health worker and sanitarian.

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Textbook of Pathology—2nd Edition

Robert Allan Moore. Edward Mallinckrodt Professor of Pathology, Washington University School of Medicine. W. B. Saunders Company, Philadelphia & London, 1951. 501 Figures. 1048 pp., including Index. Bibliographies by chapters. \$12.50.

It does not seem necessary to say much about the 2nd Edition of this splendid "Textbook of Pathology", except that it has been decidedly improved by the revisions, simplifications and added information. This is particularly apparent in the chapters dealing with the collagen and kidney diseases, virus studies and the encephalitides. The modernization of the print by employing two columns to a page facilitates reading and study. The brevity of the descriptions, especially in relation to the pathologic anatomy of specific diseases is offset by the carefully selected and well arranged bibliography presented at the end of each chapter. The division of the discussion for each specific disease entity into incidence, pathologic anatomy, pathogenesis, clinico-pathologic correlation, etc., increases its usefulness as a reference book not only to the student but also to the teacher, pathologist, and clinician.

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Global Epidemiology—Volume II

James Stevens Simmons, B.S., M.D., Ph.D., Dr.P.H., Sc.D.(Hon.), Dean and Professor of Public Health, Harvard University School of Public Health; Tom F. Whayne, A.B., M.D., M.P.H., Dr.P.H., Chief, Preventive Medicine Division, Office of the Surgeon General, United States Army; Gaylord W. Anderson, A.B., M.D., Dr.P.H., Mayo Professor and Director, School of Public Health, University of Min-

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nesota; Harold MacLachlan Herack, B.S., M.D., Member of staff, Department of Medicine and Section of Cardiology, Ochsner Clinic, New Orleans; Instructor in Medicine, Tulane University School of Medicine; Associate Author: Ruth Alida Thomas, A.B., M.A., M.P.H., Research Associate, School of Public Health, University of Minnesota; Instructor, Department of Tropical Public Health, Harvard University School of Public Health; and Collaborators: J. B. Lippincott Company, Philadelphia. 1951. 652 pp. including Index. \$15.00.

This is the second of a projected series of volumes which is intended to make available in condensed form, epidemiological information about the various countries of the world. The information was collected by the Medical Intelligence Division of the Preventive Medicine Service of the Office of the Surgeon General of the United States Army in World War II. The first volume, covering India, the Far East and the Pacific Area, was published in 1944. This second volume is concerned entirely with the Nile Valley, the Ethiopian Highlands, East Africa, the Islands of the Indian Ocean, South Africa, Equatorial Africa, West Africa and Northern Africa. The epidemiological facts for each area are presented methodically and with a bibliography in many languages. In the appendix are included a number of maps showing the distribution of important diseases and a valuable chapter entitled "Health Hints for the Tropics." Used as a source of reference for military planners, physicians advising missionaries, State Department officials and travelers, this book should serve a very useful purpose. Additional volumes of the series will be looked forward to with interest.

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Administrative Medicine

Reprinted from Nelson Loose-Leaf Medicine. Edited by Haven Emerson, A.M., M.D., Professor Emeritus of Public Health, College of Physicians and Surgeons, Columbia University. 57 Contributors. Thomas Nelson and Sons, Edinburgh and New York. 1951. 1,007 pp., including Index and Chapter Bibliographies. \$10.00.

The 1951 edition of this comprehensive volume, reprinted from the Nelson Loose-Leaf Medicine, maintains the level of excellence set by preceding editions. Though its 987 text pages are obviously planned to constitute a reference work rather than a volume for complete rapid reading, they are attractively organized, well indexed and, in most sections, interestingly written. With the exception of the chapter on the costs of public health service, a good deal of rewriting has been done and the whole subject brought up to date.

Part I is concerned with the organized care of the sick in hospitals, convalescent homes, outpatient departments, social service departments and visiting nurse associations. Part II discusses medical services provided by the Federal government, by the Armed Forces, by colleges and universities, and includes a chapter on voluntary hospital and medical care plans and a chapter on medical economics. Part III is devoted entirely to public health administrative organization: local, state, Federal, international.

This volume should find a useful place in all

medical libraries and in the offices of all medical, public health and hospital administrators.

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A Textbook of Clinical Neurology— 3rd Edition

J. M. Nielsen, B.S., M.D., F.A.C.P., Clinical Professor of Neurology and Psychiatry, University of Southern California. Paul B. Hoeber, Inc.; Medical Department of Harper & Brothers, New York. 1951. 212 Illustrations. 709 pp., including Index and Bibliography. \$10.00.

The third edition of this standard textbook of clinical neurology appears five years after the second. The many important developments in diagnostic procedures, therapeutic methods and even basic concepts make the new volume welcome. Presentation of the subject matter concisely and simply, enhances the book's usefulness for medical students studying neurology.

The subject matter presented starts with a discussion of diseases of the spinal nerves. Subsequent chapters consider diseases of the spinal cord, cranial nerves, brain stem, cerebellum, thalamus, corpus striatum and subthalamic regions, cerebrum, and muscles and bones affecting the central nervous system. Such etiological categories as traumatic degeneration, metabolic, neoplastic and inflammatory disorders are also stressed. There are, toward the end of the book, short sections concerning electroencephalography, intracranial angiography, addictions and the psychoneuroses.

The material is presented non-controversially and in a brief style. Most illustrations are either of clinical or pathological subjects, although a few anatomical diagrams appear to facilitate correlation between basic and applied observations. The bibliography is very adequate, including recent as well as historically important references. The index is designed to be of maximum helpfulness to students, and lists symptoms as well as diseases.

Dr. Nielsen has written several other important books in neurology. This new edition reflects his continual desire to so modify his text as to make it of greatest use to students.

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Diseases of the Nervous System

W. Russell Brain, D.M. (Oxon), F.R.C.P. (London), Physician to the London Hospital and to the Maida Vale Hospital for Nervous Diseases; sometime Neurologist to the Infants' Hospital and Physician to the Royal London Ophthalmic Hospital; Theodore Williams Scholar in Physiology in the University of Oxford; Price scholar in Anatomy and Physiology at the London Hospital. Geoffrey Cumberlege, Oxford University Press, London, New York. 1951. Fourth Edition. Illustrated. 1002 pp., including Index. \$8.50.

The author points out in the preface to the first edition of this text that much of the development and new knowledge in neurology was based in physiology. Accordingly, in preparing the book, he departed from the usual arrangement. The opening sections of the volume discuss in great detail the application of anatomy and physiology to the interpretation of physical signs of nervous disease. Sections dealing with anatomy and physiology serve, in other places, to introduce the clinical discussions.

Since modern medicine is tending to be more dynamic and less completely descriptive, the

author's early departure from classical presentations of clinical material is to be commended. Apparently a new edition was brought out to include advances in therapy and recent neurophysiological researches and references. In all purely mechanical respects this edition is similar to its predecessors.

No particular logic is noted in the arrangement of the clinical section, although, as Dr. Brain indicates, he tries to be practical throughout. As a matter of fact, a great deal of material is covered, most of it organized well enough. There are numerous tables, charts, and figures. These definitely assist the text in emphasizing pertinent points. The style is brief to the point of being encyclopedic. While the bibliography is limited, it includes most of the important references in English and a few in other languages.

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New and Nonofficial Remedies—1951

Issued under the Direction and Supervision of The Council on Pharmacy and Chemistry, American Medical Association. J. B. Lippincott Company, Philadelphia, London. 1951. 782 pp., including Index and Bibliography. \$3.00.

This annual review has come to be awaited with interest by medical students and physicians, not to mention commercial pharmaceutical firms. The AMA Council on Pharmacy and Chemistry will consider for inclusion in the NNR any drugs submitted to it. In a sense, then, this reflects the confidence of a firm in its product.

The monographs describe the drug's action, usage, and dose, followed by the name of the company making it and the name or names assigned to the product. These monographs are concise, well written and extremely useful. They comprise Section A, which is 472 pages. Section B lists and describes the tests and standards for Nonofficial products and is 206 pages. Section C is a bibliographic index of unacceptable products and refers to reports of these products, telling why they are not acceptable. Firm names are listed with each product. This listing occupies 69 pages. The final entries are an index to distributors and a general index.

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Health in Schools

Twentieth Yearbook. American Association of School Administrators, National Education Association, 1201 Sixteenth Street, N.W., Washington 6, D.C. 1951. 12 Illustrations. 477 pp. & Index. \$4.00.

In 1942 the American Association of School Administrators devoted their yearbook to matters of health in schools. This 1951 yearbook is again given over to school health problems as viewed by the school administrator. Of the eleven members of the Commission on Health in Schools that wrote and edited the 1942 edition, only four participated in this report: W. W. Bauer, Bernice Moss, Clair E. Turner and Charles C. Wilson. Though many valuable features of the original edition are retained, a great deal of rewriting has been done and particularly stressed are the following theses: that "as a result of the school program the behavior of individuals and the processes of community life should be lifted to ever higher levels"; that

"instructional methods, environmental conditions, and human relationships may make or mar the wholesome emotional life of the individual child"; that "with large school enrolments and overcrowded classes both school administrators and classroom teachers must make a special effort not to lose sight of the individual child."

This is a well-written, attractively organized, readable and authoritative statement of how schools can best be organized to protect and promote the health of school children and school personnel. It should prove useful not only to school administrators but to school physicians, public health workers, and members of Boards of Health and Boards of Education everywhere.

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Studio Dei Gemelli

Edizioni Orizzonte Medico. Luigi Gedda. Libro Documento in Patologia Speciale Medica. Libreria Editrice Vaticana, Città del Vaticano, Rome. 1951. 548 Illustrations, 161 Tables. 386 pp. including Index and Bibliography. Lire 15,000.

This ten pound volume virtually amounts to an encyclopedia on multiple births. Consisting of two parts, it deals with both general and scientific materials on twins and other multiple-birth siblings. Chapter VII, the last chapter of Part I, will be of particular interest to physicians, since it contains a wealth of information about birth anomalies, genetic factors and the complications that arise from an incomplete twinning process.

Part II of the volume presents data of scientific researches in anatomy and physiology, including a special chapter on twin pregnancy and its complications. Other chapters consider twin psychology, mental diseases in twins, twin classification, physical diseases in twins, and many other topics. The final chapter attempts to coordinate the many methods used in studying twins.

A tremendous amount of erudition and industry appear to have gone into the production of this book, making it a valuable addition to any medical library. Of ancillary interest may be the considerations of the role of twins in the history of culture, including discussions involving art, drama, poetry, sculpture and painting. The typography and illustrations are excellent.

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Tonsil and Allied Problems

Roy H. Parkinson, M.D., F.A.C.S. Chief of Eye, Ear, Nose and Throat Department, St. Joseph's Hospital, San Francisco. The Macmillan Company, New York. 1951. Profusely Illustrated. 432 pp., including Index. \$12.00.

With painstaking thoroughness, Dr. Parkinson has developed a monograph on all aspects of his subject, including embryology, histology, gross anatomy, surgical anatomy, clinical applications and techniques. The illustrations are uniformly excellent, including photomicrographs and wash drawings made on the scene of the operation. End of chapter bibliographies refer the reader to intensive studies of the various aspects under consideration. As a reference text, or for advanced study, the book is excellent.

Book Reviews

The Approach to Cardiology

Crighton Bramwell, M.A., M.D., F.R.C.P., Professor of Cardiology, University of Manchester. With a foreword by A. V. Hill, C.H., O.B.E., Sc.D., F.R.S., Foulerton Research Professor of the Royal Society. Geoffrey Cumberlege, Oxford University Press, London, New York. 1951. Illustrated. 122 pp., including Index. \$3.75.

Obviously an excellent teacher, the author has written this book with the idea of giving senior medical students a point of view from which to undertake clinical work in cardiology. The first chapter is a restatement of what many modern medical teachers are saying, but a clear and simple restatement which has considerable teaching value. Subsequent chapters begin with almost too simple elements. However, the author always gets down to cases rapidly, discussing the principal clinical areas of his field with lucidity and purpose. Another very good feature of the book is the way it effectively ties the basic medical sciences, particularly physiology, to clinical work.

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The Specialties in General Practice

Edited by Russell L. Cecil, M.D., Professor of Clinical Medicine, Emeritus, Cornell University Medical College; with 14 Contributors. W. B. Saunders Company, Philadelphia & London. 1951. 470 Figures. 818 pp., including Index. \$14.50.

Written by recognized experts in their respective specialties, the chapters of this book are specifically designed to serve as a manual for the general practitioner in the treatment of patients who present conditions different from the ordinary run of cases. It will be of small value as a classroom text, but should be extremely useful for students in the clinical years as a source which will give them readily assimilable capsule descriptions of a large number of diseases and syndromes. The end of chapter bibliographies vary greatly in extent and quality, depending on the particular author's view as to their probable use.

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Medical Terminology Made Easy

John Hanned, Instructor in Medical Record Library Science and Medical Record Librarian, Duke University School of Medicine. Physicians' Record Company, Chicago. 1951. 275 pp., including Index. \$5.00.

This book will provide nothing for the physician or advanced medical student, but for beginning students, for medical technologists, hospital administrators, nurses, it might well be invaluable. Anyone who must learn how to handle medical terminology intelligently and has not or will not have the intimate familiarity with the language necessary to acquire it in the painless way, can keep this volume as a study aid or as a reference. It is neither a dictionary nor a grammar, but contains components of each. The section devoted to medical equivalents for lay phrases will provide amusement, while accomplishing its more serious purpose of bringing into focus the fact that lay people don't after all, talk in scientific terms, and it is from an understanding of their testimony that much of the physician's knowledge in any given case is derived.

Atlas of Genito-Urinary Surgery

Philip R. Roen, M.D., F.A.C.S., Instructor in Urology, New York Post-Graduate Medical School; Clinical Instructor in Urology, New York Medical College. Introduction by Clarence G. Bandler, M.D., F.A.C.S. Illustrations by Charles Stern. Appleton-Century-Crofts, Inc., New York. 1951. Profusely illustrated. 325 pp., including Index. \$8.00.

By no means a complete directory or guide for a beginning surgeon, Dr. Roen's book assumes that the reader to whom the book will be useful already possesses a very good grasp of the rudiments of surgery. The text is terse but a model of clarity and editing. Illustrations are all purposeful and helpful. If there is any objection to the book it is that the student without sufficient background, who attempts to utilize the book, may well become bewildered.

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How to Live with Your Heart Condition

How to Live with Your Nerves

How to Live with Your Blood Pressure

How to Live with Your Allergy

How to Live with Your Ulcer

How to Care for the Health of Executives

Walter C. Alvarez, M.D., Wilcox & Follett Co., Chicago. 1951. Per Volume: 60c.

These little pamphlets, the longest of which are 46 pages of large, well-spaced type, all bear Dr. Alvarez' trademarked conversational style. Obviously intended for patients rather than doctors, they could well find great use as a supplement to treatment. Their value in this respect would be that each of them tends to put the best light possible on the illness being discussed, without dispensing any false information which might tend to make a patient try self-treatment or do other foolish things. The manual, "How to Care for the Health of Executives" may be especially interesting because in it Dr. Alvarez attempts to point out that the health of important men is of more value to whole industries, and sometimes to the national welfare, than they themselves, apparently, have realized. His plea for high level industrial medicine deserves an attentive audience.

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British Scientists

E. J. Holmyard, M.A., M.Sc., D.Litt., F.R.I.C., Vice-President of the British Society for the History of Science. The Philosophical Library, Inc., New York. 1951. Illustrated with 24 Portraits. 88 pp. with Bibliography. \$2.75.

No attempt is made in this book to appeal to scientists. Its primary purpose seems to be that of acquainting the man on the street with a double handful of England's great men of science. Each essay is short, just more than a comment in passing.

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The Scottish Chemist's Index of Modern Remedies

First North American Edition. The Scottish Chemist, Box No. 275, Terminal "A", Toronto. 1951. 116 pp., Indexed by Sections. \$2.00 per Single Copy. Graduated Discounts.

The introductory note to this manual states "an effort has been made to place before the profession a concise listing of ethical products available in the United States, Canada, and Great Britain. In the case of the British Sec-

tion, listing of products does not necessarily indicate their availability in Canada and the United States. Products listed are not meant to take the form of a complete dictionary, but rather as a guide to alternate prescribing in any one particular field."

The British Section contains the British Pharmacopoeia 1948, New Admissions and Deletions; British Pharmaceutical Code 1949; and the National Formulary 1949. Each section contains a detailed index and a key to names and addresses of manufacturing chemists.

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Applied Anatomy for Nurses

E. J. Becock, S.R.N., S.C.M., D.N., Sister Tutor Certificate, King's College of Household and Social Sciences; and R. Wheeler Haines, M.B., D.Sc., F.L.S., Professor of Anatomy, Medical School, Abbassia, Cairo. The Williams and Wilkins Company, Baltimore. 1951. Illustrated. 320 pp., including Index. \$3.50.

This text will serve in a satisfactory manner for the instruction of nurses. Its many illustrations, black-and-white, are deliberately simplified. The organization is regional, with an attempt made to cover both gross and microscopic anatomy in each chapter. There is some discussion of function and several rather ingenious metaphors illustrated to help in visualizing relationships. A very good book for nurses.

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Cancer of the Esophagus and the Stomach

Sixth of a Series on the Early Recognition of Cancer. Owen H. Wangensteen, M.D., Professor and Head of the Department of Surgery, University of Minnesota Medical School. American Cancer Society, Inc., 47 Beaver Street, New York 4, New York. 1951. Illustrated, some in color. 112 pp., including Bibliography.

The pamphlet is subtitled "A Monograph for the Physician." As such it is a model, being well-written, comprehensive of its subject matter, yet having a definite point of view. The work is more than a mere compilation of data. Perhaps the best part of the entire monograph is Dr. Wangensteen's remarkable introductory statement, which is vibrant with the high purpose for which the art of medicine exists.

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A Bio-Bibliography of Edward Jenner

W. R. Lefèvre, J. B. Lippincott Company, Philadelphia. 1951. Illustrated. 176 pp., including Index. \$16.00.

Limited in this edition to 500 numbered copies for North American distribution, this book is beautifully printed. There are superb reproductions of title pages of Jenner's own publications, evidence of much industry in gathering material for the bibliography, and an index that is quite readable. The volume is, indeed, a fitting memorial for the man.

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The Facts of Life

From Birth to Death. Louis I. Dublin, Ph.D., 2nd Vice-President and Statistician, Metropolitan Life Insurance Company; in collaboration with Mortimer Spiegelman, F.S.A. The Macmillan Company, New York. 1951. 461 pp., including Index and Bibliography. \$4.95.

As a reference text for speakers on health subjects to a lay audience, or for that matter,

as an engrossing book for the lay and professional public alike, the book is excellent. Treating each large area of actuarial interest in a question-and-answer method, the authors have produced a volume crammed with statistical information which is not, even slightly, dull. The text is lively and so arranged that a reader may look up a single item or just go ahead and read at his pleasure.

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A Laboratory Guide to the Anatomy of the Rabbit

E. Horne Craigie, Ph.D., Professor of Comparative Anatomy and Neurology, University of Toronto. The Blakiston Company, Philadelphia. 1951. 28 Illustrations. 113 pp., including Index. \$3.25.

Designed as a laboratory guide for courses consisting of from 24 to 60 hours, this short book is well arranged. There are short introductory sections dealing with types of tissues, anatomical terminology, and the zoological position of the rabbit. The remaining chapters proceed in limited doses through the skeleton, musculature and other systems. For its limited scope, the book is admirable.

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Philosophical Problems of Mathematics

Dr. Bruno Baron V. Freytag gen. Loringhoff, Lecturer on Philosophy, University of Tübingen. Translated from the German by Amelie Countess von Zeppelin. Philosophical Library, New York. 1951. 86 pp., including Bibliography & Index. \$2.75.

This short book is a translation of two lectures delivered by the author to his colleagues at Tübingen. The subject matter is abstract and of interest to natural scientists with a philosophical bent.

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Autopsy—Diagnosis and Technique—3rd Edition

Otto Saphir, M.D., Pathologist, Michael Reese Hospital; Clinical Professor of Pathology, University of Illinois College of Medicine. Foreword by Ludwig Hechtman, M.D. Paul B. Hoeber, Inc., Medical Book Department of Harper & Brothers, New York. 1951. Illustrated. 471 pp., including Index. \$6.00.

The purpose of this book, as it has been in the past, is to tell the student how to do autopsies and how to diagnose diseased organs and structures as found at autopsy. To make the book even more useful in this respect, the author has added new material about endocrine glands, some diseases of the osseous system have been reconsidered, and other entities, fibrous dysplasia among them, have been added. Moreover, some of the illustrations have been revised and a short chapter called "Do" or "Don't" and Certain Suggestions for Quick Orientation", has been added. An excellent book.

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The Electrical Activity of the Nervous System

A Textbook for Students. Mary A. B. Brazier, B.Sc., Ph.D. (London), Research Associate, Harvard Medical School. The Macmillan Company, New York. 1951. Chapter Bibliographies. 220 pp., including Index. \$5.00.

Beginning with a chapter on the physiology of the nervous system, the author has written a very good general survey of the electrical activity of the nervous system. Its primary au-

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dience will be students, but the included bibliographies indicate source materials for specialists. There has been no attempt made to give the book value as a technical manual.

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The Child Unborn

R. J. Harrison, M.A., D.Sc., M.B., B.Chir., F.L.S., Reader in Anatomy, University of London, at Charter's Cross Hospital Medical School. The Macmillan Company, New York. 1951. 60 Illustrations. 226 pp., including Index. \$3.00.

Written in language suited to the intelligent lay reader, "The Child Unborn" is a clear and useful volume. The illustrations are excellent for the purpose they are intended to serve, and the author has taken the trouble to discuss some of the practical topics which may disturb many non-professional people. He has included a very short but well-selected bibliography for those readers who may be interested in pursuing further either the embryology or the anatomy of sex. The book would be of supplementary interest to medical students or practitioners.

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Principles of Intensive Psychotherapy

Frieda Fromm-Reichmann, M.D. The University of Chicago Press. 1951. 246 pp., including Bibliography and Index. \$3.75.

The book represents an elaboration of a lecture course given by the author to students at the Washington School of Psychiatry, the Washington-Baltimore Psychoanalytic Institute and the William Alanson White Institute of Psychiatry. The author conceives her audience to be: psychoanalytically interested psychiatrists, young psychoanalysts, and "serious students of living." Her first chapter discusses the emotional aspects of the doctor-patient relationship. Subsequent chapters deal with both practical aspects of therapy and raise thoughtful questions, the effect of which is to provoke the reader to closer consideration of what might otherwise be blandly and superficially accepted. She states that both patient and therapist should be satisfied with the result if and when the patient develops lasting insight into his interpersonal operations.

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Directory of Fellowship Awards

For the Years 1917-1950. The Rockefeller Foundation. With an Introduction by Chester I. Barnard, President of the Foundation. The Rockefeller Foundation, 49 West 49th Street, New York, New York. 296 pp.

In this volume there is a host of information that gives a fine comprehensive idea of the work and extent of the Foundation. The compilers of the directory have attempted to be complete in their listings, but world conditions of the past three decades have made it impossible to include several hundred award recipients.

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Man and His Years

An Account of the First National Conference on Aging. Sponsored by the Federal Security Agency, Health Publications Institute, Inc., Raleigh, North Carolina. 1951. 311 pp., including Index. \$3.25.

The conference of which this volume is the result was an earnest attempt to attack the manifold problems which surround the rapidly

expanding field of geriatrics. The volume itself will be interesting to almost every doctor for its thoughtful discussions and comprehensive coverage of the areas involved. Also, because it lists all registrants and members of the planning committees for the conference sections, it constitutes a worthwhile reference book for professional personnel in the field of geriatrics and social welfare.

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Frontiers in Medicine

The March of Medicine, 1950. Columbia University Press, New York. 1951. 150 pp., including Index. \$2.50.

The 1950 Lectures to the Laity, sponsored by the New York Academy of Medicine, are herein printed with a foreword by Dr. Harold Brown Keyes and an introduction by Dr. Iago Galdston. The six lectures concerned themselves with psychiatry, geriatrics, surgery of the heart and lungs, antibiotics and medical research. Contributors included Selman Waksman, Franz Alexander, Thomas Rivers, David Seegal, Laurence H. Snyder and John H. Gibbon Jr. A handsome little volume, it will be of interest to intelligent and curious laymen, and relaxing reading for members of the profession.

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Psychology in the Service of the School

M. F. Cleugh, Senior Lecturer, University of London, Institute of Education. Philosophical Library, New York. 1951. 183 pp., including Bibliography and Index. \$3.75.

This small volume is written at and for use by teachers in the public school systems, parents, and welfare workers. Its level of terminology and complexity of subject matter are both conversational. It will serve chiefly to give parents and teachers an idea of the obstacles in the path of the child who seems recalcitrant or otherwise troubled.

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Books and Pamphlets Received

As space permits, those with the greatest interest to our readers will be reviewed.

A Textbook of Medicine

Edited by E. Noble Chamberlain; contents compiled by 13 contributors. The Williams and Wilkins Company, Baltimore. 1951. 268 Illustrations, some in Color. 962 pp., including Index. \$10.00.

Human Biochemistry—3rd Edition

Israel S. Kleiner, Ph.D., Professor of Biochemistry, New York Medical College. The C. V. Mosby Company, Saint Louis. 1951. 83 Text Illustrations, 5 Color Plates. 695 pp., including Index. \$7.00.

Internal Medicine—5th Edition

Its Theory and Practice. Originally edited by John H. Muzzey, B.S., M.D., F.A.C.P., Late Professor of Medicine, Tulane University of Louisiana, School of Medicine. 5th Edition edited by Michael G. Weil, M.D., F.A.C.P., Associate Professor of Medicine, Temple University School of Medicine. 80 Contributors. Lea and Febiger, Philadelphia. 1951. 236 Text Illustrations, 10 Plates in Color. 1,563 pp., including Index. \$15.00.

The Will to Live

Arnold A. Hutschnecker, M.D., Thomas Y. Crowell Co., 278 pp., \$3.50.

Books and Pamphlets Received

Biological Antagonism

The Theory of Biological Relativity. Gustav J. Martin, Sc.D., Research Director, The National Drug Company, Philadelphia. The Blakiston Company, Philadelphia, 1951. 64 Figures; 44 Tables. 516 pp., including Index. \$8.50.

An Atlas of Normal Radiographic Anatomy

Isadore Meschan, M.A., M.D., Professor and Head of the Department of Radiology, University of Arkansas School of Medicine, with the assistance of R.M.F. Farer-Meschan, M.B., B.S. (Melbourne), W. B. Saunders Company, Philadelphia & London, 1951. 1044 Illustrations on 362 Figures. 533 pp., including Index. \$15.00.

Diseases of the Ear, Nose, and Throat

A Textbook of Clinical and Laboratory Procedures. Georges Portmann, M.D., Professor of Otorhinolaryngology, University of Bordeaux, Dean of the School of Medicine and Pharmacy, University of Bordeaux. Translated by Fernand Montreuil, M.D., and Jules G. Walther, M.D., College of Physicians and Surgeons, Columbia University. The Williams and Wilkins Company, Baltimore, 1951. Profusely Illustrated. 728 pp., including Index. \$20.00.

A Course in Practical Therapeutics

2nd Edition. Martin Emil Rehliss, M.D., F.A.C.P., Professor of Clinical Medicine and Sutherland M. Prevost Lecturer in Therapeutics, Jefferson Medical College; Alison Howe Price, A.B., M.D., Associate Professor of Medicine, Jefferson Medical College; and 17 Contributors. The Williams & Wilkins Company, Baltimore, 1951. Profusely Illustrated. 938 pp., including Index. \$15.00.

Experiments in Biochemistry

Max S. Dunn, Ph.D., Professor of Chemistry, University of California at Los Angeles; and William Drill, Ph.D., Research Fellow, California Institute of Technology. McGraw-Hill Book Company, Inc., New York, 1951. 197 pp., including Index. Contains Data Sheets for 46 Experiments. \$5.00.

Pharmacopoeia Internationalis—1st Edition

Volume I. Bulletin of the World Health Organization Supplement 2. World Health Organization, Palais des Nations, Geneva, 1951. Also available in French and Spanish editions. 406 pp., including Index. \$5.00.

Infant Care

Children's Bureau Publication No. 8. Federal Security Agency, Social Security Administration, Children's Bureau, 1951. 145 pp., including Index. Government Printing Office, Washington 25, D. C. 20c. Discount if ordered in quantities.

The Education of Man

Heinrich Pestalozzi. Philosophical Library, New York, 1951. 93 pp. \$2.75.

Factors for You

A Study on Annual Reports. P. O. Box 1259, YMCA, Tampa 1, Florida. \$1.00.

Social Medicine in Western Europe

Report of a World Health Organization Traveling Fellowship, Summer 1950. E. Richard Weinerman, M.D., M.P.H., School of Public Health, University of California, Berkeley, June, 1951.

Curare and Anti-Curare Agents

Annals of the New York Academy of Sciences, Volume 54, Art. 3, pp. 297/530. K. R. Unna, Conference Chairman; J. A. Aeschlimann, Consulting Editor. Published by the Academy. 240 pp. Illustrated. \$4.00.

Unesco Publication 580

Report on the Activities and the Meeting of the Coordinating Committee on Abstracting and Indexing in the Medical and Biological Sciences. Available from Columbia University Press, 2960 Broadway, New York 27, New York. 85c.

The Male Climacteric: Report of a Series of 120 Cases Using Fortified Pituitary Gonadotropin Hormone. William L. Gould, M.D., Albany, N. Y. Reprinted from Medical Times (Vol. 79, No. 3) March 1951.

Male Senility: Report of a Series of 237 Cases Using Glukor, the New Fortified Pituitary Gonadotropin. William L. Gould, M.D.; and Irving Strosberg, M.D. Reprinted from Medical Times (Vol. 79, No. 10) Oct. 1951.

The Duke Endowment Year Book, No. 19. Including Annual Reports of the Hospital and Orphan Sections. The Duke Endowment, Power Building, Charlotte, North Carolina.

When Mental Illness Strikes Your Family: Blood—Your Gift of Life: Public Affairs Pamphlets No. 172 & 145, respectively. Public Affairs Committee, Inc., 22 East 36th Street, New York 16, New York. Ea., 20c.

The Microscope—Its Application, Use and Care. Compiled by E. G. Keller. E. Leitz, Inc., 304 Hudson Street, New York 13, New York.

Mass Care in Disaster. ARC 1540, June 1951. 106 pp., including Index. The American National Red Cross, Washington, D. C.

Interim Civil Defense Instructions for Schools and Colleges. TEB-3-1. Federal Civil Defense Administration, August 1951. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 30c.

Malaria Conference in Equatorial Africa. Bulletin of the World Health Organization, Vol. 4, No. 3, 1951. Available from the World Health Organization, Palais des Nations, Geneva, Switzerland; and from International Documents Service, Columbia University Press, New York 27, New York. \$1.50.

Atlas of Framboesia. K. R. Hill; R. Kodjati; and M. Sardari. World Health Organization: Monograph Series. Available from World Health Organization, Palais des Nations, Geneva; and International Documents Service, Columbia University Press, New York 27, New York. \$1.00.

Fourth World Health Assembly. Chronicle of the World Health Organization, Vol. 5, No. 7-8. Availability: Same as two above. 40c.

The Impact of the Universal Declaration of Human Rights. United Nations—Department of Social Affairs, New York, 1951. Sales Number: XIV.3. 25c.

SOPHE—Society of Public Health Educators 1950-1951. Organization and First Annual Meeting. Health Publications Institute, Inc., 216 North Dawson Street, Raleigh, North Carolina. 50c.

Guarding the Health of Baltimore. 1950—A Summary of the One Hundred and Thirty-Sixth Annual Report of the City Health Department.

Life Insurance Medical Research Fund. Sixth Annual Report—July 1, 1950 to June 30, 1951. 2 East 103rd Street, New York 29, New York.

China Medical Board, Inc. History and Program; Financial Report 1950-51. 30 East 60th Street, New York, New York.

Manual of Tumor Nomenclature. American Cancer Society, 47 Beaver Street, New York 4, New York.

Lima Declaration Regarding Medical Education. Report of the 1st Pan American Congress on Medical Education: Lima, Peru, May 14-18, 1951. Copies of the conclusions in English can be obtained from Dr. J. Harland Paul, Institute of Inter-American Affairs, c/o American Embassy, Lima, Peru.

Universal Military Training: Foundation of Enduring National Strength. First Report to the Congress by the National Security Training Commission, October 1951. 123 pp., including Index. For sale by the Superintendent of Documents, U. S. Government Printing Office, Washington 25, D. C. 35c.

General News

Floor Manager Plan Being Tested

Memorial Center for Cancer and Allied Diseases, New York City, is trying a plan for relieving its nurses of all administrative duties. Faced with an acute shortage of nurses, the hospital decided to place all non-nursing administrative responsibility under the office of central administration, with floor managers to implement the program. This was done after a study revealed that head nurses were spending approximately 40 percent of their time on non-nursing duties. At the same time the hospital innovated other devices designed to increase nurse efficiency. These included improved communications systems which, it was calculated, would save the nurses several miles of walking every day.

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Federal Security Agency

The Federal Security Agency has established an Epidemic Intelligence Service to strengthen the nation's defenses against outbreaks of epidemic disease. Twenty-one new USPHS medical officers recently completed an intensive eight-week course at the Atlanta Communicable Disease Center and then were assigned posts in twelve states. The primary job of the new service will be to render assistance in investigating disease outbreaks beyond the resources of state and local health departments to control.

Figures recently compiled by the National Office of Vital Statistics reveal that deaths from heart disease and cancer among children of school age exceed in number deaths from all infectious and parasitic diseases combined. This is believed to be the result, largely, of the use of antibiotics and of improved measures for detecting and preventing infectious diseases.

Funds totaling \$782,761 have been recently granted by the National Institutes of Health for research in psychology, psychiatry and related fields. The funds will support 58 projects, including 20 new projects.

During fiscal 1951 the Public Health Service awarded a total of \$44,371,188 to support 3,705 grants to non-Federal institutions and individuals.

A schedule of laboratory training courses given by the Communicable Disease Center for the period from January through December 1952 is now available from the Center at P.O. Box 185, Chamblee, Georgia. Information and application forms may also be requested from the same source, c/o the Chief, Laboratory Training Services.

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Medical Public Relations Seminar Scheduled

A meeting of medical school Public Relations personnel is scheduled as part of the annual meeting of the American College Public Relations Association, to be held at the Hotel Carter, Cleveland, April 16-18, 1952. *Marc G. Waggener*, chairman of the ACPRA's medical section, who attended the 62nd annual meeting of the AAMC, urges the deans to cooperate with the recommendation of their own Committee on Public Information, to the effect that medical schools support the medical seminar section by sending their representatives to the April meeting of the American College Public Relations Association.

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Public Health Programs Impeded

In his presidential address at the annual banquet of the American Public Health Association, Dr. *William P. Shepard*, outgoing president, said that some factions of organized medicine "tend to confuse public health programs with what they call 'socialized medicine'." Speaking about such current public health interests as the problem of an aging population and "its concomitant of chronic diseases", Dr. Shepard said that the "community is bound to make some effort to combat these common and serious problems. Those efforts will be less clumsy, less misdirected, less oblivious to the value of existing facilities, if

the movement is guided by the health officer with his trained staff, and if in that guidance he has the understanding and support and wisdom of the practicing physician of his community."

From the beginning, he added, the public health profession had "occasionally been beset by a few physicians who appear to fail to see the reasons for public health and whose influence at one time or another becomes sufficient to impede seriously the important objectives of the health department."

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Rockefeller Foundation News

Dr. Max Theiler, of the foundation's International Health Division, was the 1951 winner of the Nobel Prize for physiology and medicine. Dr. Theiler, 51, is a South African who has spent more than half of his life in the United States conducting research on the yellow fever virus. The award for 1951 consisted of about \$32,000, a diploma and a medal. Dr. Theiler's discovery, the 17-D vaccine, was used extensively in World War II.

Dr. Chester I. Barnard, president of the foundation, has been elected chairman of the National Science Board of the National Science Foundation.

Rockefeller Foundation grants for the third quarter of 1951 totaled \$844,000, the largest of which was \$275,000 to the National Research Foundation for post-doctoral fellowships to be awarded in the three year period beginning in 1952.

The 1950 annual report of the International Health Division, recently published, devotes much attention to the work done on malaria in various parts of the world. The range and extent of the Division's program is well illustrated by the tables and short items in the final section of the report.

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Foundation Reports

The 1951 annual report of the Commonwealth Fund indicates that medical education is approaching a new turning point, and that, as far as the Fund is concerned, "for the present no other use of its resources can be more serviceable to the health of the public" than grants for experiments in medical teaching.

The 1950 annual report of the *John and Mary R. Markle Foundation* shows that most of the \$1,160,000 appropriated by the foundation went to the support of Markle Scholars in the medical sciences. Twenty medical colleges received a total of \$744,000 for this program. Other grants included \$45,000 to Educational Testing Service, \$90,000 to the Association of American Medical Colleges, and \$30,000 to the Columbia College of Physicians and Surgeons in support of a training program for staff members of the University of Puerto Rico School of Medicine.

Rear Admiral Charles S. Stephenson, U.S.N., retired, has been named scientific director of the *Lasdon Foundation*. Admiral Stephenson recently received the 1951 Gorgas Medal at the annual meeting of the Military Surgeons of the United States.

Grants aggregating almost \$200,000 were made recently by the *Masonic Foundation for Medical Research and Human Welfare*. The awards were a continuation of the foundation's program of supporting research on rheumatic fever. Recipients of the recent awards included the University of Buffalo, Columbia University, New York University-Bellevue Medical Center, University of Rochester and State University of New York at Syracuse.

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American Hospital Association

Officers elected by the American Hospital Association this year include Dr. E. Dwight Barnett, the Rev. Donald A. McGowan and Maj. Gen. George E. Armstrong, trustees; and Dr. Arthur C. Bachmeyer, to serve again as treasurer. No vice-presidents were elected.

Gordon Gray, president of the University of North Carolina, has been chosen as chairman of the Commission on Financing of Hospital Care, a project the AHA launched as a result of action taken at the annual meeting. The commission will conduct a two year, intensive survey of hospital costs and financing. Support for the study, in the form of \$500,000 in grants, comes from the Health Information Foundation, Milbank Memorial Fund, National Foundation for Infantile Paralysis, Rocke-

General News

feller Foundation, W. K. Kellogg Foundation and John Hancock Mutual Life Insurance Company. A pilot study, begun this month in North Carolina, will serve as a model for the comprehensive effort, which will cover all of the nation's hospitals.

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Public Health Service— Materials for Construction

The Public Health Service announced on November 30 that an increase in allocation of carbon steel and copper would permit release of approximately 50 of the 230 projects which have been deferred because of an insufficient supply of materials. Forty-five of the projects will be those calling for urgent repairs. The other five will be for construction of new hospitals.

On December 1, the Public Health Service urged state health officers to cooperate in their new responsibility of analyzing all hospital construction projects within their states and recommending priority of need under the controlled materials plan. The new method of establishing priority went into effect on January 1.

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National Science Foundation Program Implemented

A Congressional appropriation of \$3,500,000 has made it possible for the National Science Foundation to plan approximately 400 graduate fellowships in the various sciences for the coming year. The majority of the fellowships will be given to predoctoral applicants, particularly to those who will be eligible to begin graduate study during the coming year. The foundation has published a guide for applying for the grants.

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Premedical Symposium Held

On December 28 a symposium on premedical education was held in Philadelphia, sponsored by Alpha Epsilon Delta, the national premedical honor society, and several other organizations. Speakers included Dr. Hugh E. Setterfield, professor of anatomy, Ohio State University; Dr. John McK. Mitchell, dean of the University of Pennsylvania School of Medicine; Dr. Maurice H. Greenhill, professor of psy-

chiatry, Duke University; and Dr. Luther E. Woodward, coordinator of the New York State Department of Mental Hygiene.

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NICI Student Directory Available

The 1952-53 directory of students participating in the cooperative plan for internship appointment has been mailed to participating hospitals and to the medical schools. The supplement will be ready about January 15. Additional copies may be obtained from the National Interassociation Committee on Internships, Room 1001, 185 N. Wabash Avenue, Chicago 1, Illinois.

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Philippine Tuberculosis Drive Set

The ECA has allocated \$350,000 annually for each of the next five years in a drive against tuberculosis in the Philippine Islands. Dr. Sixto Francisco, chief of the TB control division of the Philippine department of health, will direct the program.

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American College of Surgeons

Dr. Harold L. Foss, Danville, Pennsylvania, was chosen president-elect of the American College of Surgeons at the annual meeting of the board of governors and fellows on November 8. Dr. Robert H. Kennedy, professor of clinical surgery, New York University, was chosen first vice-president and Dr. Thomas F. Mullen, associate clinical professor of surgery, University of California (San Francisco) Medical School, was chosen second vice-president. Dr. Alton Ochsner, New Orleans, took office as president.

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Meeting Announcements

American Heart Association, annual meeting and scientific session, April 17-20, Hotel Statler, Cleveland.

Fourth Latin American Congress of Physical Medicine, February 27-March 2, San Jose, Costa Rica. Sightseeing tour February 24-March 9; by arrangement with Executive Director, 176 E. 71st Street, New York 21, New York.

Seventh Annual National Conference on Rural Health, February 28-March 1, Hotel Shirley-Savoy, Denver.

American Medical Association, annual meeting, June 9-13, Chicago.

The Personnel Exchange

To aid in solution of the problem of faculty vacancies, MEDICAL EDUCATION will list persons and positions available, as a free service. The school, department, or person may have the option of being identified in these columns or of being assigned a key number for each position listed. Mail addressed to key numbers will be forwarded to the person or department listing the request.

Information for these columns must reach the Journal office not later than the 10th of the month preceding publication. The deadline for the March issue will be February 10.

All mail should be addressed to: MEDICAL EDUCATION, 185 N. Wabash Avenue, Chicago 1, Illinois.

Faculty Vacancies

Wanted: Physician, (pediatrician or internist) as Medical Director for a small clinical investigative unit affiliated with a medical school. Problems concern interrelationships of ventilation difficulties and of circulation. Director must have clinical and investigative skill and be able to set up and administer own program. Address: V-1, MEDICAL EDUCATION.

Oto-Rhino-Laryngology Residencies are open at the new Ohio Health Center. Board approved. Two years if had internship and basic science course, otherwise three years. 1100 new beds and affiliation with 300 bed Children's Hospital, etc. Teaching clinics; excellent operative service including endoscopy, laryngectomies, radical neck, maxillo-facial, mandibular, fenestration, etc. Write: Ohio State University, College of Medicine, attention Chairman Otolaryngology Department; or 40 S. 3rd Street, Columbus 15, Ohio.

Full time Assistant Pathologist to enlarge Attending Staff, Medical College of Virginia. Good salary, concomitant with experience. Arrangements for consultation practice. Teaching opportunities. Write: Dean of Medicine, Medical College of Virginia, Richmond, Va.

Assistant professor of Pathology; beginning July 1, 1952. Duties: Teaching of medical and dental students, research, and participation in autopsy and surgical pathological program of teaching hospital. Qualifications: M.D., and two years in pathologic anatomy, or demonstrated ability in research. Salary depends on qualifications. Address inquiries to Professor of Pathology, Medical College of Alabama, Birmingham, Alabama.

Pathology staff vacancy beginning July 1952 for young pathologist with interest in teaching, and research experience in a field such as cardio-

vascular disease, gerontology, endocrinology, pathologic physiology, or protein chemistry. New facilities in reorganizing department. Opportunity for increase in rank and salary. Please address inquiries to Chairman, Pathology Department, University of Kansas Medical School, Kansas City 12, Kansas.

Personnel Available

Internist-Educator. Young, certified, experienced in teaching, editing, research and administration, prominent position, many publications, seeks opportunity for clinical investigation, editorial work and teaching. Highest references. Address: A-3, MEDICAL EDUCATION.

Microbiology: Man, 41, married, 1 child. A.M., Ph.D. Desires teaching, research, or departmental responsibilities, in medical school, university, city or state health laboratories. Experience in teaching bacteriology, mycology, parasitology, public health, histology and biology. Now professor and head of division of microbiology, but will accept lower rank in a progressive department. Sigma Xi and professional societies; publications. Excellent references. Available January or September 1952. Address: A-2, MEDICAL EDUCATION.

M.D. desires position as assistant professor of Radiology. Experience includes certification in both roentgen diagnosis and radiotherapy including supervoltage therapy; clinical teaching, research and publication. Available January 1, 1952. Address: A-4, MEDICAL EDUCATION.

Pathologist: Professor of Pathology with many publications. Opportunity to develop pathology of cancer by autopsy and surgical specimen studies and by histochemistry. Requirements: medical school connection; privilege of fee collection on private patients or other equitable arrangement; specified minimal income. Address: A-5, MEDICAL EDUCATION.

Man, age 30, Ph.D. in June 1952, with major in parasitology, minor in bacteriology and immunology; desires position with future in teaching and/or research. Experience in teaching and in the diagnosis of intestinal parasites. Sigma Xi and professional societies. Excellent references. Address: A-6, MEDICAL EDUCATION.

Anatomist, long teaching experience. Now associate professor. Publications, admissions committee experience. M.S., M.A., Ph.D. Desires teaching, research or administrative duties where promotions are possible. Available June 1952. Address: A-7, MEDICAL EDUCATION.

Personnel Available

Personnel Available (Continued)

Assistant or Associate professor; Ph.D., two years medical school. Numerous publications; awarded two fellowships. Qualified to teach *biochemistry* or *physiology*, especially steroid chemistry and endocrinology. Available September 1952. Salary specification. Address: A-8, MEDICAL EDUCATION.

Ph.D. desires position in *Anatomy* department. 16 years teaching experience in anatomy, embryology, histology in undergraduate and graduate fields. Research and publications in radiation effects and cancer. Address: A-9, MEDICAL EDUCATION.

Prizes, Essays and Loans

The *Robert Roesler de Villiers Foundation* is offering a basic award of \$1,000 for a paper on leukemia. Contest closes on October 20, 1952. If the judges so decide, the award may be raised to \$1,500 or even as much as \$5,000. Rules may be obtained by writing to the foundation at 417 Park Avenue, New York, New York.

The *American Society for the Study of Sterility* is offering a prize of \$1,000 for the most outstanding contribution on the subject of infertility and sterility. Essays must be submitted not later than March 1, 1952. For full particulars, write American Society for the Study of Sterility, 20 Magnolia Terrace, Springfield, Massachusetts.

The *American Goiter Association* again offers the Van Meter award of \$300 for an essay on problems related to the thyroid gland. Entries must be submitted not later than March 1, 1952, must be in English, not over 3,000 words, double-spaced and in duplicate. Submit to Dr. George C. Shivers, 100 E. Vrain Street, Colorado Springs, Colorado.

A cash award of \$250 is offered for the best original contribution on any phase relating to chest disease. Entries must be submitted before April 1, 1952 to the *American College of Chest Physicians*, 500 North Dearborn Street, Chicago 10, Illinois.

Physicians in the Chicago area who have received their M.D. degree within six years of March 1, 1952 are eligible for the \$150 award of the *Chicago Society of Industrial Medicine and Surgery*. The award is given for a paper on some aspect of the field and should be submitted by the above date. Further details are available from the society.

Knights Templar Education Foundation has nearly \$3,000,000 available in its Revolving Student Loan Fund service. Each year this money is distributed to approximately 7,500 junior, senior and graduate students throughout the United States, regardless of race, creed, color or sex. The average loan is about \$400. Further information is available from the foundation's offices at 14 East Jackson Boulevard, Chicago, Illinois.

Regulations Regarding Selective Service Registration

Students under 50 years of age, who are not members of a reserve component of the armed forces, are liable for special registration under Public Law 779 within 5 days of the receipt of the M.D. degree. If the M.D. is not granted until after the internship, registration is delayed accordingly. Registration is with the same local board with which the student has previously registered. Registration can, however, be made through any local board and forwarded by that board to the board of original registration.

If the student receiving his M.D. degree was under 26 on June 19, 1951 and was deferred, or if he has been deferred by Selective Service since that date, for any cause, his liability under the regular registration is extended until he attains his 35th birthday. He must, however, register under the special registration within 5 days of receipt of his M.D. degree.

It is our understanding that the Selective Service System generally considers the first year of an internship as necessary training and, therefore, a physician registrant in his first year of internship is necessary to the maintenance of the national health, safety, and interest. A local board has full responsibility for deferring any registrant who is necessary to the maintenance of the national health, safety and interest and may do so upon the request of the individual registrant or upon the written request of the

hospital employing the intern. The decision of the local board is final, subject to appeal.

It is our further understanding that the Selective Service System ordinarily considers that a young physician registrant who has not had military service since September 16th, 1940 or who is in the Priority 1 category should be available for military service at the termination of his first year of internship. Accordingly, such a registrant should not be assigned to a residency unless his local board defers him for that purpose. Otherwise, he may be ordered for induction during the course of his residency.

If a young physician was over 26 on June 19th, 1951 and has not had his liability extended to his 35th birthday (i.e., has not been deferred by Selective Service since June 19th, 1951) and has had no military service since September 16th, 1940, he may not be called until after all men in Priority 1 and 2 have been taken.

The national, state, and local advisory committees to the Selective Service System will, we understand, support requests for deferment for the completion of the first year of internship and will also support requests for deferment for other physicians, including residents, when in their opinion the services of such individuals to an institution are necessary to the maintenance of the national health, safety and interest.

College News

Albany Medical College

Dr. William L. Holt has been appointed professor and director of the department of psychiatry and psychiatrist-in-chief of Albany Hospital. Dr. Holt was formerly assistant clinical professor of psychiatry at Harvard Medical School.

Dr. Thomas F. Frawley, formerly research fellow in medicine at Harvard Medical School, has been named director of the newly created section of endocrinology and metabolism. Dr. Frawley was associated at Harvard with Dr. George W. Thorn in studies of adrenal cortical physiology. Drs. Jean Shanks and Joyce Richardson have joined the department of pathology. Dr. Joseph R. Goldstein has been appointed attending radiologist at Albany Hospital and instructor in radiology.

Dr. Adrian A. Ebler, associate professor of surgery, died on November 5 of acute leukemia. He was 43 years old.

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Baylor University

The new \$4,500,000 Methodist Hospital, an eight-story 315-bed building, was dedicated at the Texas Medical Center in Houston on November 10. The new hospital is equipped with an intercommunication system which connects various nurses' stations with rooms of patients. There is also a communications system by which a nurse can write an order directly to the supply room. Each patient's room is equipped with an oxygen outlet and the operating rooms are wired for television which will enable Baylor students and faculty to watch operations from a conference room in the building.

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Boston University

The first student to receive a scholarship award from the Alumni Association of the Boston University School of Medicine was Dwight Akers, 28, a third year student in the School of Medicine. Dr. Ensio K. F. Ronka, alumni president, said that the

scholarships would be made to students "who have good records, who show good promise, and who can make good use of the fund." The alumni have allocated \$5,000 this year for several awards.

Dr. David McLean Greeley has been appointed assistant dean to succeed Dr. Francis C. Lowell. The latter will continue teaching and research work on allergies.

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University of Buffalo

An assistant deanship in the School of Medicine has been recently announced, made possible by a grant of \$24,500 from the New York State Health Department for expansion of regional postgraduate education for physicians in western New York counties. Dr. Milton Terris has been appointed to the position. For the past five years Dr. Terris has been associated with the American Public Health Association in Bethesda, Maryland.

The first program set up by Dr. Terris was a postgraduate course on "Recent Advances in the Detection and Treatment of Cancer", which was held in the Roswell Park Memorial Institute, and the Buffalo General and Meyer Memorial Hospitals on November 15 and 16.

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University of California, L. A.

The new School of Medicine was formally dedicated on November 2, with faculty and students attending a program at which Dr. Herbert M. Evans, director of the Institute for Experimental Biology on the Berkeley campus, was the principal speaker. Also present to give short addresses were Governor Earl Warren, President of the University Robert G. Sproul and Dean Stafford Warren.

Dr. Evans called for cooperation in research, devotion to cultural learning as well as to technical training, and attention to spiritual values. He stated that a great physician is a great soul, and that "this means a far wider and deeper knowledge of the

College News

course of human cultural history than you can possibly get in a short premedical course."

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Chicago Medical School

An Italian physiologist, winner of a Fulbright Exchange Fellowship award, has arrived at the school for a year of research on the physiology of the pancreas, and on metabolic problems involving the use of radioactive isotopes. Dr. Leonida Santamaria, assistant professor of general pathology at the University of Perugia, will conduct his studies under the direction of Dr. Piero P. Foa and Dr. A. R. Goldfarb. The speaker on the second John J. Sheinin Lectureship was Dr. William Dameshek, hematologist of the New England Center Hospital, Boston.

Research grants totaling \$20,488 have been received at the school for four projects currently under way. These include a grant of \$6,000 to Dr. A. C. Ritchie, research fellow, for studies on factors influencing cancer production in animals, from the National Cancer Institute; a grant of \$6,588 from USPHS to Dr. Israel Davidsohn, professor and chairman of the department of pathology, for work on hemolytic anemia; a grant of \$5,400 from White Laboratories, Inc., to Dr. Aldo A. Luisada, associate professor of medicine, for a continuation of studies on Gitaligin; and a \$2,500 grant from the Atomic Energy Commission to Dr. Philippe Shubik, assistant professor of surgery and Dr. A. Robert Goldfarb, associate in the department of biochemistry, for studies on cancer-producing effects of beta radiations.

Scholarship gifts totaling \$34,000 have been received by the school recently. These include \$14,000 from the Dave Hokin Foundation; \$10,000 from the International Rolling Mills Corporation; and \$10,000 from Samuel Briskin, Chicago manufacturer.

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University of Chicago

Dr. Henrietta Herbolzheimer has been appointed assistant professor of preventive medicine. Dr. Herbolzheimer was formerly affiliated with the Illinois State Department of Health.

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University of Cincinnati

Applications for a limited number of fellowships are being accepted by the Institute of Industrial Health. Any registered

physician who has satisfactorily completed at least two years of training in a hospital accredited by the American Medical Association may apply. (Service in the Armed Forces or private practice may be substituted for one year of training.)

The course consists of two years of intensive training in industrial medicine, followed by one year of practical experience under adequate supervision in industry. Candidates who complete the course satisfactorily will be awarded the degree of Doctor of Industrial Medicine. During the first two years, stipends vary in accordance with marital status, from \$2,100 to \$3,000. In the third year the candidate will be compensated for his service by the industry in which he is completing his training.

Requests for additional information should be directed to the Institute of Industrial Health, College of Medicine, Eden and Bethesda, Cincinnati 19, Ohio.

The University and the city of Cincinnati jointly sponsored a three day program on October 31, November 1 and 2, which centered about the dedication of the \$1,850,000 Mont Reid Pavilion. The pavilion, an addition to the Cincinnati General Hospital was named in honor of the late Dr. Mont Rogers Reid, head of the College of Medicine's department of surgery until his death in 1943. A highlight of the meeting was a reunion of internists, surgeons and pediatricians; each group holding two day scientific programs and a banquet.

Speaker at the dedication ceremonies was Dr. Frank H. Lahey, noted Boston surgeon. Also participating were Mayor Albert D. Cash, University President Raymond Walters, and Sir James Spence, internationally known pediatrician. Both Dr. Lahey and Sir James Spence were granted honorary doctor of laws degrees by President Walters.

On November 17 a seminar on the follow-up and management of patients by health department personnel was held at the Kettering Laboratory. Conducting the seminar was Dr. J. Greenwood-Wilson, medical officer of health at Cardiff, Wales and president of the Sanitary Institute of England. He is in this country under auspices of the Rockefeller Foundation.

University of Colorado

The new million dollar cancer research wing of the School of Medicine was formally opened in ceremonies that extended over two days, December 1 and 2. Principal speaker on the December 1 program was Dr. Leonard Scheele, surgeon general of the U.S. Public Health Service. Also present were Lt. Governor Gordon Allot, President of the University Robert L. Stearns, and Dr. Florence R. Sabin, vice-chairman of the Denver Board of Health and Hospitals and a recent recipient of a Lasker award. The December 2 program consisted of an open house for the general public and friends of the Medical Center. The new building houses the department of radiology, offices and laboratories of the department of biophysics, laboratories of chemical embryology, offices of various clinical departments, and a top floor devoted to animal surgery and animal quarters for the medical school.

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Columbia University

For the first time anywhere, a course of study leading to an advanced degree in administrative medicine has been established. On January 1 an Institute of Administrative Medicine became a part of the School of Public Health. The new institute will train graduate students for leadership in all phases of health administration. Extensive research programs designed to determine the best methods of providing the nation with better medical care also will be conducted. Dean Willard C. Rappleye announced the project. Dean Rappleye said that all work at the Institute would be divided into the five major fields of: hospital administration, prepayment medical care, public health administration, industrial medical administration, and medical school administration. He expressed the belief that the educational program would eventually place medical administration in the hands of specially trained members of the medical profession.

Development of the Institute is expected to proceed slowly, with "very few" students enrolled in the present session, while the first objective of course correlation and organization of research progresses. The In-

stitute is being financed by a group of private foundations.

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Duke University

The annual meeting of the North Carolina Region of the American College of Physicians was held at the School of Medicine on December 6. Featured speaker was Dr. Cyrus C. Sturgis, professor of medicine at the University of Michigan. Dr. Charles H. Burnett, newly appointed professor of medicine at the University of North Carolina, was among the speakers at the scientific session.

There was a strong atomic coloration to the news from Duke in the past two months. In the first place came the announcement that Army, Navy and Air Force physicians had begun a five month study of the medical aspects of nuclear energy in a program sponsored by the Atomic Energy Commission. Dr. Philip Handler, professor of biochemistry, said that "training is in the biological effects of radiation, use of radio-active tracers as research tools, and in therapeutic uses of radioactive substances." Next there was the visit of three Japanese medical administrators to Duke Hospital in late October. These men, Drs. Chikatoro Togari, dean of Nagoya University; Tatsuo Ozawa, supply section chief of the medical bureau of welfare ministry in Tokyo; and Dr. Yukio Yoshida, a government hospital inspector and assistant chief of medical affairs, made their visit as part of a three month Army sponsored tour of American medical installations. Their objective was to gather ideas and information for rebuilding Japanese hospitals and medical schools. The visitors said that there are now only 64 hospitals in Japan, but their quality has been greatly improved under the occupation. There is still a terrible insufficiency of administrators and a need for strengthening medical teaching, they added.

Dr. Paul G. Fillmore, recently returned from two years' work with the Atomic Bomb Casualty Commission in Japan, reported that most of the Japanese who were A-bombed in 1945 were now "perfectly normal except for a few scars." Certain late effects of radiation appearing at the

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present time are radiation cataracts of the eyes. The cataracts can be removed by a comparatively simple operation. Now on an Atomic Energy Commission fellowship, Dr. Fillmore said the ABCC is a long-term project that will continue to study exposed and non-exposed persons, but that Japan's greatest medical problem was tuberculosis.

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Emory University

Miss Anna Thurman has recently retired from her position as Secretary of the School of Medicine, completing 30 years of service at the school. She was married on October 6, to Mr. George Eugene Finch, district representative of the W. B. Saunders Company.

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George Washington University

Dr. John Parks, professor and head of the department of obstetrics and gynecology, has been elected to the American Board of Obstetrics and Gynecology. Dr. Parks fills the vacancy of Dr. Joseph L. Boer, of Michael Reese Hospital, Chicago.

Dr. Thomas McPherson Brown, professor of medicine, has been designated as principal researcher in a study of hypersensitivity mechanisms in collagen diseases. The project was made possible by a \$10,000 grant from the National Institute of Metabolic Diseases and Arthritis.

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Harvard Medical School

Gifts totaling \$1,762,955.03 were received by the University during the third quarter of the year. These included amounts of \$421,805.36 to the Medical School and \$284,365.31 to the School of Public Health. Nondepartmental gifts for this period totaled \$284,320.76.

Dr. William Lloyd Aycock, associate professor of preventive medicine and hygiene and in the School of Public Health, died on October 24. He was 63 years old. Since 1923 Dr. Aycock had been in charge of the laboratories and field investigations of the Harvard Infantile Paralysis commission.

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University of Illinois

"The Power and Responsibility of the Press" was the topic of a symposium pre-

sented at a meeting of the general faculty of the College of Medicine on November 14. Dr. H. G. Poncher served as moderator. Participants included Arthur J. Snider; Robert Kleckner; Roy Gibbons; and Hugh Stewart, science editors on the four Chicago daily newspapers.

A collection of nearly 2,000 Kodachrome slides has been added to the photographic library of the department of dermatology. The slides, illustrating a wide variety of skin diseases, were prepared by the late Dr. Maurice Dorne.

A two day Conference on Education in the Medical Sciences was held at Chicago Illini Union on October 12 and 13. Features of the conference were seminars on problems of pre-dental and dental education, opportunities in the health sciences and biology as a pre-professional requisite. Dr. Carl C. Pfeiffer, professor and head of the department of pharmacology, was among the representatives of the College of Medicine at the conference.

On November 7, Dr. Ward Darley, vice-president of the University of Colorado, addressed the Student AMA on the topic, "The Medical School of Tomorrow." Dr. Darley's main thesis was that, for intelligent learning, students of medicine require a "locus of experience" from which to assess facts and data that are presented to them. He urged that, in the study of medicine, judgment be stressed as much as factual knowledge.

Harry G. Higgins Jr. has been appointed assistant administrator of the University of Illinois Research and Educational Hospital. Mr. Higgins served as comptroller of the Miami Valley Hospital, Dayton, Ohio, from 1946 to 1950.

The Biological Photographic Association has established an award in honor of Thomas S. Jones, professor of medical and dental illustration. Officially known as the Tom Jones Award, the honor will be given annually for the best paper to be published in the Association's Journal.

Dr. Frances A. Hellebrandt, formerly of the Medical College of Virginia, has assumed duties as professor and head of the department of physical medicine and rehabilitation. Dr. Hellebrandt is also serving as chief of her specialty at the Illinois

Research and Educational Hospital. She succeeds Dr. *H. Worley Kendall*, who accepted a position as medical director of the Institute of Physical Medicine and Rehabilitation at Peoria.

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Indiana University

Dr. *Orville T. Bailey* has been named professor of neuropathology. Dr. Bailey was formerly associated with Harvard Medical School.

Eight physicians have received appointments as instructor at the Medical Center. They are Dr. *Francis E. Stout*, gynecology and obstetrics; Dr. *John R. Russell*, neurosurgery; Dr. *John R. Scott*, pediatrics; Dr. *Charles E. Test*, medicine; Dr. *Franklin B. McKechnie*, anesthesiology; Dr. *Malcolm A. Holliday*, pediatrics; Dr. *Thomas C. Moore*, surgery; and Dr. *Dale M. Schulz*, pathology.

Dr. *W. Foster Montgomery* was chairman of the American College of Surgeons delegation to the Eighth Inter-American Congress of Surgery held in October in Buenos Aires.

The "Treatment of Hyperthyroidism" was the topic of the first of the annual series of Telephone Seminars. Dr. *J. O. Ritchey*, professor and chairman of the department of medicine, served as moderator. Dr. *J. A. Campbell*, department of radiology; Drs. *Glenn Irwin* and *Helen Van Vactor*, department of medicine; Dr. *Frank B. Ramsey*, department of surgery; and Dr. *Harry Ross* were members of the panel.

Dr. *L. W. Freeman* has received a continuation grant of \$1,000 from the Midwest Veterans' Chapter of the National Paraplegia Association. Dr. *Edwin A. Lawrence* attended a recent meeting of coordinators of cancer teaching held at the University of Cincinnati, where he presented a discussion of "Visual Education for Undergraduate Audiences." Dr. *Harris B. Shumacker Jr.* has departed for Japan and Korea as a consultant to the Armed Services on frostbite. He expects to spend about three weeks at field hospitals in Korea.

State University of Iowa

A five-bed metabolic ward has been established in the University Hospitals recently. The ward is under the supervision of Dr. *Richard Eckhardt*, associate in internal medicine, and is operated in close cooperation with several of the hospitals' laboratories. Support for the project comes from a total of \$25,000 in grants from Eli Lilly Research Laboratories, the U.S. Public Health Service, and the U.S. Army.

Dr. *George E. Perret*, assistant professor of neurosurgery, has received a Fulbright lectureship for the current academic year. Dr. Perret will lecture on medical science at the University of Salonika, Greece.

Gifts and grants totaling \$96,000 have been received by the University for scientific research recently. Notable among these are a grant of \$24,000 from the Josiah Macy Jr. Foundation for a three year study on response of humans to exposure to cold, under the direction of Dr. *Steven M. Horvath*. Dr. *H. M. Hines*, head of the department of physiology, has received a continuation grant of \$10,000 from the Cereal Institute, Inc., for further study in physiology and nutrition. The U.S. Public Health Service has given \$14,000 to finance undergraduate teaching in cardiovascular and related gerontology subjects under Dr. *William B. Bean*, head of the department of medicine. Another USPHS grant, for \$19,039, will support a training program in clinical psychology.

Nineteen of the Iowa Hospital-School for Severely Handicapped Children's pupils will be full-time dormitory residents this year. The remaining five children attend only during the day, returning to their homes in the Iowa City area at night. The school provides full-time medical care in addition to regular public school instruction. This year more stress is being placed on recreational activities, with a "party night" being held every Friday evening. This is the school's fourth year of operation and probably its last in temporary quarters. The new building now under construction is expected to be completed sometime next summer.

Beginning in June 1952, students completing their junior year in medical school will serve one month preceptorships with Iowa general practitioners as part of their undergraduate training. The plan was adopted after several months of careful consideration.

Jefferson Medical College

Two administrative appointments were made at the Medical College, effective with the beginning of the school year. Dr. James R. Martin, emeritus professor of orthopedic surgery, was appointed associate dean of the College. Dr. Robert Bruce Nye, assistant professor of medicine, was appointed to the post of assistant dean.

Dr. Theodore R. Fetter has been appointed Nathan Lewis Hatfield professor of urology and head of the department. Dr. David M. Davis has been appointed emeritus professor of urology. Dr. Martin J. Sokoloff has been named acting director of the department of diseases of the chest. Dr. Sokoloff succeeds Dr. Burgess Lee Gordon, who resigned to accept the presidency of Woman's Medical College.

Effective October 15, the Board of Trustees of the College accepted the resignation of Dr. Hobart A. Reimann as Magee professor of medicine and head of the department of experimental medicine.

Dr. Carl J. Bucher, associate professor of pathology and director of the clinical bureau at Jefferson Hospital, died at his home on October 9. He was 61 years old. Dr. Harry Hudson, professor of orthopedic surgery, died on November 18 at the age of 72.

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University of Kansas

Work has begun on the new service building at the Medical Center. The six-story structure will cost an estimated \$1,600,000, will be 140 feet long with 120,000 square feet of floor space, and is planned for completion in 500 working days. Although most of the building will be given over to storage and utility rooms, central supply, an orthopedic work room, a printing office and the like, the top two floors will contain the chest disease unit.

Dr. Homer W. Smith, professor and chairman of the department of physiology, New York University College of Medicine, delivered the Noble P. Sherwood lecture on November 12. Dr. Smith's subject was "The Development of Modern Renal Physiology."

The Seventh Annual postgraduate course in surgery will take place January 21-25. Formal lectures will represent only about

half of the instruction, with the rest of the time devoted to ward walks and case conferences. Seventeen guest lecturers and eighteen members of the faculty will participate.

Dr. Edward Thomas Gibson, clinical professor of psychiatry, died on October 18. He had been a member of the faculty for 31 years.

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University of Louisville

Dr. U. Pentti Kokko has accepted appointment as associate professor in child health research. Dr. Kokko will continue studies on poliomyelitis in the school's Kentucky Child Health Foundation, under the direction of Dr. Alex J. Steigman.

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Loyola University

Dr. Gertrude M. Engbring, associate clinical professor and vice-chairman of the department of medicine, was presented with a scroll by students of the School of Medicine on October 18 for having "devoted the most time and effort to clinical clerkship teaching." The award was made on the basis of a student vote.

University Hospital, affiliated with Stritch School of Medicine, has closed its doors to make way for a superhighway. The School of Medicine's teaching program will not be affected since Loyola is affiliated with Mercy, Loretto, County and Lewis Memorial Hospitals. The corporation controlling the 133-bed institution will remain intact but its future plans are indefinite.

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Mayo Foundation

Dr. Charles H. Slocumb was recently given the Triennial Gold Medal Award by the West London Medico-Chirurgical Society in London. The award is customarily conferred upon a younger scientist for outstanding work.

Drs. Phillip S. Hench and Edwin C. Kendall were honored at a testimonial dinner on November 29 at Coffman Memorial Union, University of Minnesota. Each was presented with a Special Citation for Distinguished Service by the Board of Regents of the University.

A recent lecture at the Foundation was

delivered by Dr. *Shields Warren*, professor of pathology, Harvard Medical School and director of the division of biology and medicine of the Atomic Energy Commission. Dr. Warren spoke on the "Biologic Effects of Radiation." Another recent lecture on "Kidney and Liver Function During General Anesthesia" was delivered by Dr. *E. M. Papper*. Dr. Papper is professor of anesthesiology at Columbia University.

Dr. *Alfred W. Adson* died on November 12 at the age of 64. He had been a permanent member of the staff since 1917 and was professor of neurosurgery since 1931.

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College of Medical Evangelists

The establishment of a school of dentistry on the Loma Linda campus was voted recently by Seventh-day Adventist officials. According to present schedules, classes will be admitted in September 1953, although the first groups will be somewhat smaller than the eventual 48 per class that is planned. An initial appropriation of \$750,000 for supplies and equipment has been voted.

Expansion to the extent of \$5 million was approved at a recent annual session of the Board of Trustees. Besides the proposed dental school, funds will be used to erect a new administration-library building on the Loma Linda campus, and to acquire at least six city blocks on the Boyle Heights site of the Los Angeles campus. New buildings will include a new hospital, library, housing units and laboratories.

The School of Medicine has become one of the first 15 medical schools in the nation to institute preceptorships. Plans call for junior and senior students to spend one month with a general practitioner. Physicians to work with the project will be, preferably, those who are graduates of CME and are practicing in rural areas.

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McGill University

Dr. *Donald S. McEacher*, associate professor of neurology, died at his home on October 31. Dr. McEacher, 47, was senior neurologist of the Montreal Neurological Institute and president of the Canadian Neurological Society.

University of Michigan

More than 4,000 persons, including leading educators and 425 official delegates, attended the November 27 installation of Dr. *Harlan H. Hatcher* as eighth president of the University. Dr. Hatcher was vice-president of Ohio State University before assuming his present post. He succeeds Dr. *Alexander G. Ruthven*. Dr. *Joseph C. Hinsey*, dean of Cornell Medical College and chairman of the Executive Council of the Association of American Medical Colleges, represented the Association at the inauguration.

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University of Minnesota

Continuation courses at the university include four scheduled in the period from mid-January through early March. The first is a course for general practitioners on electrocardiography, January 21 to 25. Each registrant will be given the opportunity to interpret approximately 200 tracings.

Dr. *Harold G. Wolff*, professor of medicine and associate professor of psychiatry, Cornell Medical College, will give the annual J. B. Johnston lecture on January 30, in conjunction with a course on clinical neurology held January 28 to February 9. Dr. Wolff's subject for the lecture will be "On the Nature of Pain." A continuation course February 14-16 for general practitioners will deal with therapy of cardiovascular diseases. Dr. *Charles P. Bailey*, professor of surgery, Hahnemann Medical College, will be the visiting faculty member for the course. The final course for this period will have dermatology as its subject. Dr. *Arthur C. Curtis*, professor and chairman of the department of dermatology, University of Michigan, will be the visiting faculty member. The course will be under the direction of Dr. *Henry E. Michelson*, chairman of the division of dermatology.

Professor *C. H. Andreus*, National Institute for Medical Research, University of Leeds, London, will give the annual George Chase Christian cancer lecture on the evening of January 15. His subject will be "Current Thoughts on Viruses and Cancer."

Dr. *Leo G. Rigler*, head of the depart-

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ment of radiology, was one of the members of the Unitarian Service Committee team that recently returned from a two month tour of Israel and Iran. While there, Dr. Rigler delivered formal lectures and was active in many informal teaching exercises.

Dr. Ancel Keys, director of the laboratory of physiological hygiene, is spending the present academic year on sabbatical leave. During this period Dr. Keys is conducting a study on cholesterol metabolism in the nutrition laboratory of Dr. Hugh Sinclair, Oxford, England.

Dr. Gaylord W. Anderson, Mayo professor and director of the School of Public Health, recently assumed his duties as president of the American Public Health Association. Dr. Anderson's inauguration took place at the annual meeting of the Association in San Francisco.

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University of Mississippi

Six of the thirty physicians recently added by the State Board of Health to the Roster of Mississippi Doctors are young persons who have received all or part of their medical education as a direct result of the state medical education scholarship loan program. The program is designed to provide more doctors for rural areas in the state by assisting deserving medical students to meet the cost of their education. According to legislation authorizing the program, 75 percent of the total group must practice in towns of 5,000 population or less; the remaining 25 percent may be approved by the Board to practice in areas of larger than 5,000 population. The six physicians of this group recently qualified to practice within the state include one woman and two Negro physicians.

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New York Medical College

The student loan fund was augmented by the proceeds of a student organized carnival held on the evening of November 6. First held in 1945, the carnival has since become an annual affair, the one this year having "Holiday" for its theme. Entertainment included treasure hunting, dancing, a carnival queen, and refreshments served in a student cafeteria converted for the occasion into a Cafe Par-

sienne. Medical students in charge of the carnival included William P. Mimnagh Jr., general chairman; John P. Herrlin, treasurer; and John W. Mills, coordinator.

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New York University

Dr. Frode Jensen has received appointment as associate dean of the Post-Graduate Medical School. For the past year he has been assistant dean of the school. Dr. Jensen is also director of the House Staff Educational Plan of the New York Committee on the Study of Hospital Internships and Residencies.

At the annual alumni day of the College of Medicine, Dr. Henry E. Meleney, chairman of the department of preventive medicine, delivered a talk on "Changing Concepts of Medical Care." Dr. Meleney declared that the answer to the high cost of modern medical service lay in the development of voluntary medical and hospital insurance plans and in the group practice of medicine. He also stated that the "practicing physician's task tends more and more to be one of conserving health, detecting chronic disease in its early stage, and treating the patient to restore and prolong his period of active life." Pointing out that many patients and their families had problems only casually related to their illness which nevertheless interfered with successful treatment, Dr. Meleney said "no modern hospital can be considered first class without an adequate social service department."

He cautioned that, because of the growth of insurance plans and the consequent reduction in the number of free-care patients, "the teaching of medical students will be greatly handicapped unless semi-private patients can be used for this purpose. This will require the cooperation of both patients and private practitioners."

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State University of New York

The 16th Adam M. Miller Memorial Lecture was delivered at the College of Medicine on the evening of December 14. The speaker was Dr. J. C. Eccles, professor of physiology at the School of Medicine, University of Otago, New Zealand. Dr. Eccles' topic was "The Intracellular Record-

ing of Nerve Cell Activity and its Bearing on the Problem of Central Excitation and Transmission."

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University of North Carolina

Approximately 85 percent of the \$10,000,000 proposed basic building program of the Division of Health Affairs has now been committed to contract. The main part of the 400 bed University Hospital and outpatient clinic is more than 75 percent completed. The acceptance of patients is scheduled for April. Cancer research laboratories are expected to be completed at the same time. Dormitory quarters for 100 interns, residents and fellows will be ready by June and construction is expected to get under way shortly on a 60 bed psychiatric unit with a section for alcoholics. In addition, funds have been appropriated for a 100 bed tuberculosis unit.

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University of North Dakota

The University of North Dakota School of Medicine has been accepted by the Association of American Medical Colleges, in membership as a result of action taken upon recommendation of the Executive Council of the Association at its October meeting.

Dr. W. E. Cornatzer, former assistant professor at Bowman Gray School of Medicine, has been appointed professor and head of the department of biochemistry. John P. Davison has been appointed assistant professor of biochemistry. Dr. Cornatzer has received grants totaling \$48,160 for the current year. These include \$27,400 from the North Dakota Cancer Society to establish a radioactive isotope laboratory for the treatment of cancer and to study metabolism in experimental cancer; \$11,572 from the Atomic Energy Commission for a study of the effects of radiation on the functional capacities of tissues; and \$9,450 from the U.S. Public Health Service to study the effects of various drugs and hormones on phospholipide turnover in animals and man.

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Northwestern University

The University honored 100 outstanding citizens of the states which comprised the original Northwest Territory at special ceremonies conducted on December 2. Barring any members of either the University faculty or board of trustees, the "Centennial Awards" were given to living

individuals for the "impress they have made upon their generation during a lifetime of distinguished service." Included on the list were a number of medical scientists and administrators. Among them were Dr. Donald Balfour, Mayo Foundation; Dr. Herman N. Bundesen, president, Chicago Board of Health; Dr. Anton J. Carlson, former chairman of the department of physiology, University of Chicago; and Dr. Phillip S. Hench, head of the Mayo Foundation department of rheumatic diseases. Others honored were Dr. James B. Herrick, Chicago; Dr. Howard T. Karsner, former professor of pathology, Western Reserve University; Edwin C. Kendall, research chemist, Mayo Foundation; Dean William S. Middleton of the University of Wisconsin Medical School; and Dr. Ralph Waters, professor emeritus of anesthesiology, University of Wisconsin.

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Ohio State University

The Ohio State Medical Association has chosen its third recipient for the \$2,000 Rural Medical scholarship which the association sponsored. He is Donald Nikolaus, who entered the College of Medicine as a freshman student in the fall quarter. Nikolaus received his premedical education at Ashland College.

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University of Oregon

Financed by a \$100,000 grant from the Rockefeller Foundation, a five year program in constitutional medicine is well under way, headed by Dr. Howard P. Lewis. The study will collect and classify extensive records and measurements of individuals over a long period of time in an effort to shed light on individual tendencies toward certain diseases. Dr. William H. Sheldon of Columbia University, who acted as adviser in establishing the study feels "there are strong inclinations in preliminary group studies that certain diseases run patterns and are sometimes revealed many years ahead." Dr. Chesmore H. Eastlake, also of Columbia, is now at the Medical School as full time assistant director of the project.

Deans of two medical schools were recent visitors on campus. On November 2

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Dr. Francis Scott Smyth of the University of California School of Medicine delivered a lecture on "Medical School Faculties." On November 16, Dr. Joseph L. Johnson, Howard University School of Medicine, visited as a stop on his tour of medical installations throughout the nation. Dr. Johnson is gathering ideas in contemplation of the new Basic Science Building to be constructed at Howard.

Dr. Karl H. Marzloff, associate clinical professor of surgery, delivered the 21st Charles Sumner Bacon lecture at the University of Illinois College of Medicine on October 10. Dr. Warren C. Hunter, professor and head of the department of pathology, was re-elected for a two year term to the board of directors of the American Cancer Society at its recent New York meeting. Dr. George A. C. Snyder, associate professor of pathology, died in Portland on November 5. Dr. Snyder was a 1934 graduate of the Medical School.

More than \$38,000 in grants have been received recently. The largest of these is a grant of \$25,000 from the National Cancer Institute for a project under the direction of Dr. Hunter, head of the department of pathology. Dr. Carl G. Heller, associate clinical professor of medicine, has received \$6,480 from the U.S. Public Health Service, and another USPHS grant, \$4,644, will be used for a project entitled "Effects of Digitalization in Patients with Acute Rheumatic Myocarditis", under the joint supervision of the departments of medicine and physiology. A continuation grant of \$2,400 from Parke, Davis & Company will support additional research by Dr. Elton L. McCawley, assistant professor of pharmacology.

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University of Pennsylvania

Dr. John P. Hubbard, professor of public health and preventive medicine, has been appointed executive secretary of the National Board of Medical Examiners to succeed Everett Elwood, who is retiring after serving in that capacity since 1921. Dr. Hubbard, appointed associate secretary in 1950, has been, during the last eighteen months, reviewing the technics of the examinations.

A memorial meeting for Dr. Otto F. Meyerhof, late research professor of physiological chemistry, was held at the University on December 6. Dr. Meyerhof died on October 6 at the age of 67. He was a

joint winner of the 1923 Nobel Prize in Medicine for studies of lactic acid, and a former director of the Kaiser Wilhelm Institute of Physiology in Heidelberg. The speakers included Dr. Carl F. Cori, Washington University professor of pharmacology and biochemistry, and three former pupils of Dr. Meyerhof in Germany. They were Dr. Severo Ochoa, New York University; Dr. David Nochmansohn, Columbia University; and Dr. Fritz Lipmann, Harvard University.

Dr. Albert M. Kligman, associate professor of dermatology and syphilology, is supervising a project made possible by a grant of \$8,000 from Lederle Laboratories, Inc. The purpose of the study will be to determine whether or not the use of antibiotics increases the likelihood of fungus infections in persons receiving the drugs.

Dr. Alexander Randall, professor of urology from 1929 until 1946, died at his Chestnut Hill home on November 18. Dr. Randall was 69 years old. Dr. Joseph J. Zimmerman, a member of the staff of both the Medical School and the graduate school of medicine, died at his home on October 11. Dr. Zimmerman was 36 years old.

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University of the Philippines

Important changes in the faculty and administration of the College of Medicine took place recently as a result of legislation. By the provisions of Republic Act No. 660, retirement is compulsory for all government officials who have reached the age of 65. In accordance with this law, four top members of the College of Medicine retired on October 31. They were Dr. Antonio G. Sison, dean of the College, director of the Philippine General Hospital, and professor of medicine; Dr. Antonio D. Vazquez, professor of surgery; Dr. Aristeo R. Ubaldo, professor of ophthalmology and otorhinolaryngology; and Dr. Augusto P. Villalon, superintendent of Philippine General Hospital. Dr. Sison had been a member of the faculty for 43 years, Dr. Ubaldo for 39, and Dr. Vazquez, 38. The retiring members were honored by the student body and faculty at a convocation and banquet on October 31.

Dr. Agerico B. M. Sison succeeds to the

posts of dean and director of the hospital. He has been a member of the faculty since 1921. To succeed him as secretary of the College of Medicine is Dr. *Florentino Herrera Jr.* Dr. *Jose M. Barcelona* is the new superintendent of the hospital. The other two new appointments are Dr. *Arturo B. Rotor*, assistant dean and director of the postgraduate school, and Dr. *S. Ador Dionisio*, chief of clinics.

Dr. *Harold H. Loucks*, chairman of the China Medical Board, visited the school recently as part of his tour of the Orient. During his stay Dr. Loucks visited various hospitals and held conferences with the president of the University and with officials of the College of Medicine.

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University of Rochester

The 70 millimeter x-ray motion picture camera demonstrated for the first time at the annual meeting of the Radiological Society of North America on December 2, was developed at Rochester. Research and design on the new camera were directed by Dr. *George H. Ramsey*, professor of radiology; Dr. *James S. Watson Jr.* consultant in radiology and medicine; and *Sydney A. Weinberg*, associate in radiology. Their work was partially supported by U.S. Public Health Service funds.

A drive for funds to make expansion of medical training and research possible began November 17 with distribution of a handsome booklet called "The Making of a Doctor." The booklet tells, with words and pictures, what is involved in the lengthy educational process that medical students undergo before they become physicians. It also contains an eloquent plea for generosity on the part of potential benefactors, pointing out the areas where medical schools perform services and where they could expand their services, if funds were available.

Grants totaling \$65,356 have been received by the department of orthopedic surgery for the purpose of attempting to synthesize drugs for the relief of muscle spasm in cerebral palsy. The grants came from the United Cerebral Palsy Association, \$25,356, and from the Squibb Institute for Medical Research. The project

will be under the supervision of Dr. *R. Plato Schwartz*, associate professor of orthopedic surgery.

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Rutgers University

The Foundation for Microbiology is prepared to make its first grants. The grants are reserved for projects unable to obtain support from any other existing source but showing promise of adding to the knowledge in the field of microbiology. The foundation's resources are assigned by Dr. *Selman Waksman*, from royalties paid on streptomycin. Its total annual income is expected to approximate \$40,000. Dr Waksman gave as examples of projects worthy of support, publication of special treatises, maintenance of collections of cultures, and organization of microbiological conferences and symposia.

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Saint Louis University

Dean *Melvin A. Casberg* has resigned his position for reasons of health, effective July 1. He has been dean of the school since August 1, 1949. A 1936 graduate of the School of Medicine, Dr. Casberg returned after wartime service, which included being Madame Chiang-Kai-Shek's personal physician, a tour of duty in India as surgeon-in-chief at a mission hospital, and service in both North Africa and China with the 21st General Hospital and other units. During his two and a half years as dean, Dr. Casberg had achieved a reputation as a capable and progressive administrator whose primary concern was improvement of the quality of teaching at the school.

The James B. Miller and Ethel D. Miller Institute of Experimental Medicine was established at the School of Medicine on December 7. The new unit was made possible by another endowment by *James B. Miller*, prominent industrialist, and recipient of the 1949 Fleur DeLis award of St. Louis University. The present gift raises the total of Mr. Miller's donations to almost \$700,000. The present endowment emphasizes research in emphysema, various phases of which will be carried on by Dr. *G. O. Broun*, professor of medicine, with

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the aid of Drs. *Herbert Sweet, Clement Sullivan, Burnett Peden and Gerard Mudd.*

Dr. *E. V. L. Brown*, professor of ophthalmology at the University of Illinois, spoke at a special lecture on December 8 on "Doctor Wintersteiner—His Teaching Methods and Procedures." Dr. Brown explained some of the slides in the Wintersteiner—Elschnig collection which has been property of the school for thirty years. The collection contains about 15,000 slides and illustrates virtually every eye disorder recognized by specialists in the field. Plans are being laid to microfilm the collection so that it will be available on request.

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University of Southern California

Dr. *Telfer B. Reynolds*, department of medicine, received one of the first three fellowships from the Bank of America-Giannini Foundation. Dr. Reynolds left in November to work in the London cardiology laboratory of Dr. *James Michael*.

Dr. *Harold E. Pearson*, professor and head of the department of public health, is serving as acting head of the department of medical microbiology because of the resignation of Dr. *John F. Kessel*. Dr. Kessel joined the faculty of the school of medicine at UCLA. Dr. *Louis H. Winer* has recently resigned as associate clinical professor of medicine. Dr. *John B. Field* has accepted appointment as assistant clinical professor of medicine. Dr. *Juan Antonio Gonzales-Palencia*, a graduate from Madrid in 1949, has been appointed fellow in medicine.

Grants: \$10,075 from the California State Department of Health for the services and expense of a pediatric consultant to spend part of his time teaching and at staff duties at the Children's Hospital, U.S. Public Health Service, \$18,468 to Drs. *Harry J. Deuel* and *Roslyn Alfin-Slater*, department of biochemistry, for studies on cholesterol metabolism. USPHS, \$21,594.60 to Dr. *Douglas Drury*, department of physiology, for studies of experimental hypertension and glucose metabolism. Los Angeles Heart Association, \$7,300 to Dr. Drury and Dr. *Jack Flasher*, for work on differentiation of nutritional arterial flow. From the estate of the late *John S. Alcott*, \$65,000 to the Institute for Medical Research at the Cedars of Lebanon Hospital, for work on cirrhosis of the liver under Dr. *Harry Goldblatt*, department of path-

ology. \$10,000 from an anonymous donor for work under Dr. *George C. Griffith*, cardiology. \$10,000 from USPHS for a study of vascular permeability under Dr. *Chester Hyman*, department of physiology. Drs. *John W. Mehl* and *Hugh A. Edmondson*, \$19,116 from the Public Health Service, to study potential carcinogenic environmental hydrocarbons. Dr. *Frederick J. Moore*, department of medicine (experimental), \$26,730 from USPHS, and \$10,000 from the Ely Lilly Co. for study of various aspects of adrenocortical steroids. \$15,822 from the Damon Runyan Memorial Fund to Drs. *Paul Starr* and *John B. Field*, department of medicine. To Dr. *Arnold Ware*, department of biochemistry, \$21,800 from the office of the Surgeon General of the Army, and \$6,640 from USPHS for blood studies.

Dr. *William S. Kiskadden* was elected president of the American Association of Plastic Surgeons for 1952-53. Dr. *Hugh A. Edmondson* has assumed his duties as head of the department of pathology, succeeding Dr. *Ernest M. Hall*, now professor emeritus.

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Southwestern Medical School

On January 1 Dr. *George Nelson Aagaard* assumed his duties as dean of the school. Dr. Aagaard has been director of continuation medical education at Minnesota. Between the time Dr. *Carl A. Moyer* resigned the deanship and the assumption of duties by Dr. Aagaard, Dr. *A. J. Gill*, professor of pathology, had been serving as acting dean.

Dr. *Thomas W. Farmer*, professor of neurology, has been serving as acting chairman of the department of internal medicine, since the resignation of Dr. *Charles Burnett*. Dr. Burnett has accepted appointment as head of the department of medicine at North Carolina.

New full-time faculty appointments: Dr. *Paul Donaldson*, assistant professor of bacteriology; Dr. *Morton Mason*, professor of clinical chemistry; Dr. *Alvin P. Shapiro*, assistant professor of neuropsychiatry; Dr. *Charles R. Bates*, assistant professor of obstetrics and gynecology; Dr. *Frank Harrison*, professor of pathology; Dr. *J. J. Quilligan Jr.*, associate professor of pediatrics; Dr. *John Harrison Copenhagen*, assistant professor of pharmacology; Dr. *Marion T. Jenkins*, professor of surgery (anesthesiology).

Promotions of full-time faculty: To professor: Dr. *Allen F. Reid*, biophysics; to associate professor: Dr. *Donald Seldin*, internal medicine; Mrs. *Ruth Sanders*, medical art; to assistant professor: Dr. *E. James McCranie*, neuropsychiatry; Dr. *Ben Wilson*, surgery; Miss *Patricia O'Neill*, medical art.

Stanford University

A postgraduate course in ophthalmic pathology will be given by Dr. *Frank Counsel Winter* in ten three-hour sessions during the week of February 11-15. Registration will be limited to twenty students. Further information may be obtained by writing to the Office of the Dean, Stanford University School of Medicine, 2398 Sacramento Street, San Francisco 15, California.

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University of Tennessee

A new chemistry laboratory for research in surgery has been opened in the new Institute of Pathology building. In addition, part of the old Pathology Building will be remodeled as a laboratory devoted to animal experimentation on surgical problems. Dr. *James D. Hardy*, formerly of the University of Pennsylvania department of surgery, has been named to head the new laboratories.

Dr. *Roger E. Koeppen*, formerly at the University of Illinois, Urbana, has been named research associate to work with Dr. *John L. Wood*, professor of chemistry, on a project sponsored by the Atomic Energy Commission.

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University of Texas—Medical Branch

On December 7 the new Experimental Science Building on the Austin campus was dedicated. The building will house the Biochemistry Institute and the department of zoology of the University. Dr. *Detlev W. Bronk*, president of Johns Hopkins University, spoke at the dedication.

Dr. *Eduardo de Robertis*, professor of physiology, University of Montevideo, spoke on December 14. He described the results of electron microscope studies of nerve tissue. On December 13 Dr. *Chauncey D. Leake*, vice-president of the University for the Medical Branch, gave a television broadcast on the scientific work of Leonardo da Vinci; the broadcast was under the auspices of the Houston Natural History Museum.

A lecture on the "Psychotherapeutic Treatment of Mental Diseases" was delivered on December 3 by Dr. *Andrea Rapond*, president of the Swiss National

Committee for Mental Hygiene. Dr. *Rapond* was president of the European Committee for Mental Hygiene in 1939 and 1950 and president of the World Federation for Mental Health in 1949.

Two visitors from London gave lectures on the campus of the Medical Branch during November. H. *Munro Fox*, president of the International Union of Biological Sciences gave a lecture on November 8 entitled "Red, Blue and Green Bloods." From November 12 to 15, Dr. *Kenneth J. Franklin*, professor of physiology at the University of London, offered a series of discussions on fetal circulation.

A pediatric refresher course was offered from November 26-30, under the direction of Dr. *Arild Hansen*, professor of pediatrics. A refresher course on traumatic and emergency surgery is being given January 7-11.

Patrick *Romanell*, professor of philosophy, Wells College, Aurora, New York, was guest speaker on December 10. Professor Romanell's talk was entitled "The Medical Significance of Contemporary Mexican Culture."

Miss *Elizabeth Runge*, librarian at the Medical Branch, has been appointed associate professor of medical bibliography. The Medical Branch library will be moved to larger and more satisfactory quarters in the new Gail Borden Laboratory Building. Dr. *J. B. Kass*, class of 1913, who had been maintaining, since 1922, a scholarship for research in preventive medicine, left provision in his will to endow the award permanently. A special committee decides annually on the recipient of the award.

The new Galveston County Child Development Center will be under the direction of Dr. *C. C. Morris*, associate professor of pediatrics, and W. M. *Verneaud*, clinical psychologist in the department of pediatrics. The Center was made possible by funds from the Hogg Foundation for Mental Hygiene and the Galveston County Crippled Children Society. A number of other local and state agencies have cooperated in the venture. Quarters are being arranged for it by the Galveston school system.

On December 4, Dr. *Chauncey D. Leake* acted as moderator for a seminar on medi-

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cal education. The speakers were Dr. W. W. Nowinski, who spoke on the "Broad Aims of Continental Medical Education", and Dr. D. Bailey Calvin, dean, whose topic was "Broad Aims of American Medical Education."

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Vanderbilt University

Dr. Hans Ludwig Kottmeier, chief of the gynecological section of Radiumhemmet, Stockholm, Sweden, was the 1951 Flexner lecturer at the School of Medicine. Dr. Kottmeier delivered a series of six lectures in late October and early November on various aspects of the treatment of malignant diseases of the female genitalia. His first lecture of the series was entitled "The Program of the Cancer Campaign in Sweden."

The Abraham Flexner lectureship was established in 1927 by the late Bernard Flexner when he gave \$50,000 to the medical school for the purpose. It is awarded every two years to a scientist of outstanding attainments who must spend as much as two months in residence, working in association with one of the departments of the school. The faculty selection committee chose, as the subject of the lectures this year, the radiological treatment of cancer. In this connection it is noted that carcinoma of the uterus is the most common major malignant lesion seen in Vanderbilt Hospital.

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University of Vermont

Dr. Charles Mallory Williams, professor of dermatology from 1913 to 1930, died at his home in Stonington, Connecticut on November 12. Dr. Williams was 79 years old.

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Medical College of Virginia

The 18th annual clinical postgraduate session in ophthalmology and otolaryngology was held at the Medical College on November 27-30. The series of lectures was sponsored by the Virginia Society of Ophthalmology and Otolaryngology.

Gifts and grants to the institution announced in November totaled \$93,392. Grantors included the American Cancer

Society, the Army and the U.S. Public Health Service.

Recent faculty promotions include Dr. Thomas Walker to associate professor of anesthesiology, and Sidney Kay to associate professor of legal medicine.

Dr. Frank Foote Jr. and Dr. William Sunderman were among the chief participants at the regional meeting of the American College of Pathologists held at the College on November 30 and December 1.

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University of Virginia

"Common Traumatic Injuries in General Practice" is the subject for the January 11 conference for general physicians. The conference is the second postgraduate symposium scheduled for the current academic year. The next, on April 4, will deal with "Infectious Diseases."

Dr. James Robert Cash, Walter Reed professor of pathology, was honored by colleagues and friends on December 1, the occasion of his twentieth anniversary with the Department of Medicine.

During the past few months Dean Vernon W. Lippard has continued his efforts for the building program which is urgently needed to replace University Hospital wards now grown obsolete and potentially dangerous as fire hazards. Dean Lippard has made a number of speeches in various communities throughout the state, explaining the legislative program of the Virginia Council on Health and Medical Care, in relation to the building programs of the hospital.

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Washington University

Approximately 250 surgeons the country over came to St. Louis on November 29 and 30 to honor Dr. Evarts A. Graham, professor emeritus of surgery. Scientific sessions in honor of Dr. Graham were held on both days, and the establishment of the Evarts Ambrose Graham Award, to be given for an outstanding contribution to surgery, was announced on November 30. Principal speaker for the dinner on November 29 was Dr. Edward Dells Churchill, professor of surgery at Harvard Medical School and surgeon-in-chief of Massachusetts General Hospital. At the scientific

sessions papers were presented by former students of Dr. Graham, including Dr. Brian Blades, professor of surgery, George Washington University; Dr. Warren Cole, professor of surgery, University of Illinois; Dr. Robert M. Moore, professor of surgery, University of Texas; and Dr. Nathan Womack, professor of surgery, University of North Carolina.

Dr. Graham has been a member of the faculty for 32 years. During that time he has received many awards and honors. On October 26 he received the annual award of the American Cancer Society in recognition of his being the first surgeon to remove an entire lung in the treatment of cancer. For the occasion Dr. James Gilmore, a Pittsburgh obstetrician who 18 years ago was the patient in Dr. Graham's now famous operation, was in the audience to watch the surgeon receive the honor.

Dr. Chi Hua Wu, associate professor of gross anatomy at the National Defense Medical Center, Taipai, Formosa, is now at the School of Medicine on the first portion of a six-month traveling fellowship. Sponsored by the American Bureau for Medical Aid to China, Dr. Wu hopes to visit New York, Columbia, Harvard, Yale, Cornell, Chicago, Michigan and California before returning home in his study of methods of teaching, trends in research, old and new equipment, textbooks and related materials.

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University of Washington

Dr. Raymond B. Allen disclosed on November 22 that he had resigned as president of the University of Washington to accept appointment as director of the Government's Psychological Strategy Board. Dr. Allen assumes his new duties on January 2, succeeding Gordon Gray, president of the University of North Carolina, who recently resigned to return to his academic duties.

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Wayne University

The Wayne University Medical Alumni Association has recently announced plans to raise \$200,000 for construction of a library wing to be added to the new Medical

Science building. The library, approximately 48,000 volumes and 672 current periodicals, is now housed in the newest of the present medical school buildings. The financial campaign is the first ever staged by an organized Wayne alumni group. Dr. Clark D. Brooks is president of the board of trustees of the fund and honorary chairman of the campaign committee, which is headed by Dr. John E. Webster.

A basic course in geriatrics is being offered to Detroit physicians by the division of general practice of Grace Hospital. The first of the eleven classes was held in November, with sessions scheduled through April. Dr. Frank A. Weiser, director of education and clinical research, pointed out that in Detroit alone there are about 150,000 persons over 65 years of age.

Working with a grant of \$7,988 from the Health Information Foundation, a team of researchers from Wayne made a study of the public relations program instituted by the Toledo and Lucas County, Ohio, Academy of Medicine in 1950. Dr. Edgar A. Schuler, who headed the group, Dr. Albert J. Mayer, both of the sociology and anthropology department, and Dr. Robert J. Mowitz, of the department of public administration, comprised the team. Walter E. Boek, research director for the Health Information Foundation, stated that he was impressed with the thoroughness and potential significance of the study. The full report, now being prepared for publication, will be distributed in the near future among health, research, medical and other interested groups.

Dr. Loren W. Schaffer, chairman and professor of the department of dermatology and syphilology, has gone to Tel Aviv at the request of the Israeli government to set up a national program in the fight against venereal disease. Dr. Schaffer is sponsored by the World Health Organization. Planning short visits to the major European capitals on his return, he expects to be gone two months.

Dr. John R. Rees, director of the World Federation for Mental Health, London, was the opening speaker, December 1, in the annual Leo M. Franklin Lectures in Human Relations. His topic was "Mental Health

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for the Next Generation." Other speakers in the series will include Dr. Benjamin Spock, University of Pittsburgh, and Dr. Bruno Bettelheim, University of Chicago.

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University of West Virginia

A complete development plan for the proposed four year school of medicine, dentistry and nursing at the University is being prepared by the Chicago firm of Schmidt, Garden & Erickson for the Board of Governors. The firm had served as architect for more than a hundred hospitals and several medical schools, principally in the south and west. Under the terms of the agreement, the firm will limit its work to a layout of the 145 acre tract to be used as the site of the new center. Drawing of plans for the buildings will be given attention by the Board of Governors after the formal report is submitted.

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University of Wisconsin

A lecture, "The Law and Medicine," was presented on October 30 by Dr. Alan R. Moritz, professor of pathology at Western Reserve University.

A postgraduate course in gastroenterology was held on campus December 11-13. Dr. Karver L. Puestow, professor of clinical medicine, was in charge. Dr. Ralph Campbell has been appointed to the executive board of the newly formed Academy of Obstetrics and Gynecology and has been named Governor of District 6, which includes 7 mid-Western states and two Canadian provinces.

Sir Alan Rook, senior health officer at Cambridge University, recently spent four days at the medical school. During his visit, Sir Alan delivered a lecture on his work at the English university. The de-

partment of preventive medicine received his main attention.

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Yale University

For the first time in any medical school, a sociologist has been appointed to a position in one of the departments. The department of pediatrics, according to its chairman, Dr. Milton J. E. Senn, has appointed Albert F. Wessen, who wrote his Ph.D. thesis on the "Social Structure of the Modern Hospital", to a one-year special internship. The appointment, supported by the Russell Sage Foundation, will be renewable if results are promising.

Mr. Wessen's duties will include teaching, research, observation and evaluation of pediatrics, both in the School of Medicine and in Grace-New Haven Community Hospital. His rank will be that of research assistant.

Dr. Senn pointed out that the trend of modern medicine is toward regarding the patient as a whole person, not merely as a sick body. He said, "We feel that in the development of new medical insight and especially in the teaching of medical students, increased attention must be paid to the social environment of the patient. For this reason we are sure that a social scientist can add to the work of the department by contributing insights of social science to medical science."

During the autumn session, the Yale University Student Mental Hygiene Service marked its twenty-fifth year of existence in a testimonial dinner to Dr. Clements C. Fry, chief psychiatrist. It was noted at the time that more than 8,000 students have been aided in the quarter-century, and that 10 percent of all students in the university at the present time receive help. At the beginning, only a small fraction of that number would accept guidance.

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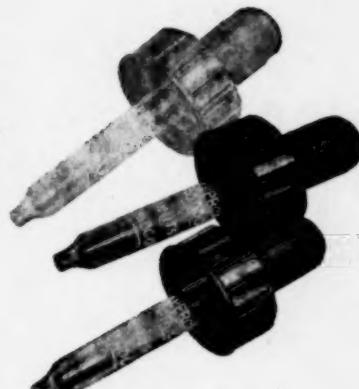
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